

CHEMICAL

EQUIPMENT PREVIEW

New { PRODUCTS
APPLICATIONS
PROCESSES

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CCA

Over 30,000 Came, Saw

IT WAS with a feeling of trepidation that the Chicago Section of the American Chemical Society decided to sponsor the **National Chemical Exposition** held in Chicago December 11-15, inclusive.

They should be gratified with the outcome. The exposition was very successful, both from the point of attendance and quality and quantity of exhibits. (Official gate check places attendance at 32,063.)

Many exhibitors commented on the high degree of interest shown by responsible chemical process manufacturing men — an interest which proved its sincerity in actual orders.

The exposition was essentially one of chemical products. The attendance at the exposition indicated that the various agencies responsible for publicizing chemistry and its accomplishments to the American public have accomplished a very excellent piece of work. Most of the visitors seemed to be extremely interested in seeing those new accomplishments brought about through the labors of the chemists. They also seemed to have a discerning comprehension of those things which were new. The exhibits consisting essentially of a manufacturer's new developments were crowded.

Many of the newer accomplishments in chemistry were on display. The exhibits attracting most attention were those which were tastefully arranged and which carried sufficient descriptive matter to enable the casual observer to become familiar with what was being exhibited.

This exposition was like all others in the writer's experience, in that equipment in motion attracted much more attention than equipment not in motion, irrespective of the merits of the exhibit.

One of the most costly and really one of the best exhibits failed to attract the attention it deserved because no statements were posted

—Continued on last page.

The Editors' Spotlight

—interesting items selected by The Editors in preparing this issue.

Colloid Mill . . . 3-Stage Action—Triple processing action gives fine dispersions . . . 2,560,000 clippings of material per minute. Water jacketed. Dis-assembled and cleaned in two to three minutes. See item CEP2265, page 5.

Radiamatic Pyrometer—Accuracy unaffected by dust, fumes or corrosive atmosphere. For operations under severe conditions of temperature, vibrations, etc. Easily installed. Self-contained and compensated for ambient temperature errors. See item CEP2320, page 15.

Corrosion Control—For boiler systems. Dissolved oxygen recorder sensitive to 1 part in 400,000,000. Eliminates former method of checking by chemical means. Continuous indicating and recording eliminate possibility of errors which depend largely on operator's skill. See item CEP2307, page 13.

Tri-Clad Polyphase Induction Motor—Cast iron frame gives more complete protection. Current carrying parts have improved insulation. Other improvements in bearing design and lubricating arrangements. Motors have cast-aluminum rotor, pressure-relief system of greasing for ball-bearing motors, etc. See item CEP2394, page 23.

Terpene Polymer Resin—Compatible with paraffin, natural and mineral waxes. Useful for alcohol resistant coatings in conjunction with Pliolite. High melting point, pale color and low ash. Natural, non-saponifiable; resistant to water, acid and alkali. Has exceptionable softening action on rubber. See item CEP2886, p. 9.

Remote Pneumatic Transmission System—Eliminates electrical transmission hazards in explosive atmospheres. System is a correlation of temperature, pressure, flow or liquid level data on a centralized panel or in control room, remote from point of measurement. See item CEP2313, page 14.

Pressure Regulator—Easy loading, no springs, weights, stuffing box. Air-dome-loaded design for accurate regulation of high and low pressure control of hot fluids whether steam, liquids or gases. Constant air load in dome assures sensitive regulation. No springs or weights to adjust. See item CEP2296, page 11.

Complete Product Directory—page 2.

JANUARY

FEBRUARY

1941

Volume 4

Number 1



Eagle High Temperature Insulations *do not Deteriorate!*

Outstanding efficiency is maintained in-
definitely because Eagle dark gray mineral
wool is chemically and physically stable.

EAGLE SUPER "66" CEMENT
EAGLE INSULSEAL
EAGLE BLANKETS
EAGLE SUPERTEMP BLOCKS
EAGLE LOOSE WOOL
EAGLE GRANULATED WOOL
EAGLE INSUL-STIC

See Sweet's Catalog for specifications

THE EAGLE-PICHER LEAD COMPANY
CINCINNATI, OHIO

When inquiring specify CEP2252... see information request blank, pgs. 16-17

Screening Tomato Pack Waste at 450 Gals. Per Minute!

THE user of this Link-Belt liquid screen
—a Maryland tomato canner—formerly
pumped waste to a nearby field, where
it drained into a creek. Among other dis-
advantages of this practice, frequent clean-
ing of the stream was necessary.

Now, they screen all waste-water
through Link-Belt vibrating screens, and
recover the solids which are hauled away
by the farmers to be used as fertilizer.
They have saved themselves a lot of
trouble and expense and improved con-
ditions greatly.

5382

WRITE FOR FREE FOLDER TO-DAY!

Get the facts... this folder illustrates and com-
pletely describes construction and action of this
screen. Ask for Folder CEP-1877.

LINK-BELT COMPANY
307 N. Michigan Ave., Chicago

LINK-BELT Vibrating Screens

When inquiring specify CEP2253... see information request blank, pgs. 16-17

DIRECTORY of products in this issue

You will find listed below the names of products and new
literature items described in this issue, with page refer-
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PUMPS for the PROCESS INDUSTRIES!

CAPACITY RANGE 0 to 1500 GPH
PRESSURE RANGE 0 to 22,500 PSI

For accurate continuous feeding of **ACIDS — ALKALIS — SALTS — SLURRIES — DYES — SOLVENTS — EMULSIONS — INHIBITORS** and other Chemical Compounds.

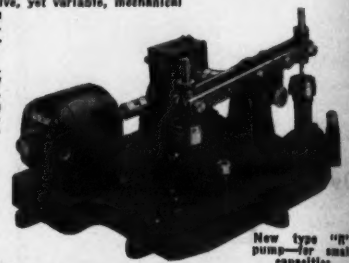
9 TYPES
OVER 200 SIZES

These pumps are adaptable for the many requirements in research laboratory experiments or for continuous plant production operations.

All types are available for corrosive or non-corrosive services. They provide a positive, yet variable, mechanical means of injecting fluids in accurate, measured amounts.

Available in single, dual, or multiple feed assemblies.

We extend our fullest co-operation, based on years of practical experience with single plunger pumps, in working out any specialized installations which you may be contemplating.



Write for catalog.

HILLS-McCANN A CO

2370 Nelson St.,
CHICAGO, ILL.

New type "R" pump—for small capacities.

Hills-McCanna Positive PROPORTIONING PUMPS

When inquiring specify CEP2254... see information request blank, pgs. 16-17

Containers
For Gases,
Solids and
Liquids

DO YOU KNOW THE ECONOMIES PROVIDED BY HACKNEY FACILITIES?

Hundreds of manufacturers are saving thousands of dollars—by taking advantage of Hackney's design and precision manufacturing facilities. Efficiency has been stepped up—costs reduced. Sometimes, Hackney engineers have improved the product being used—sometimes a new shape or container has been developed to meet specifically a particular problem.

You, too, can gain these advantages. Hackney has been producing parts, equipment and containers for handling and storing gases, solids and liquids for more than 35 years. This rich store of experience is available to you. It may result in important savings. Write today for full details about this complete time- and money-saving service which Hackney offers to manufacturers—no obligation.

PRESSED STEEL TANK COMPANY

1397 Vanderbilt Commerce Bldg. N.Y. • 209 S. LaSalle St. St. Louis
Chicago • 694 Roosevelt Bldg. Los Angeles • 1493 So. 66th St. Milwaukee

CONTAINERS FOR GASES, LIQUIDS AND SOLIDS

When inquiring specify CEP2255... see information request blank, pgs. 16-17

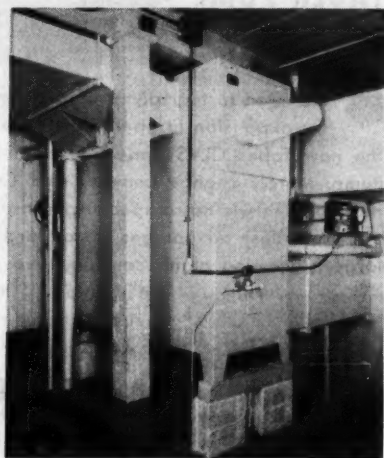
NEW SOLUTIONS OF PLANT PROBLEMS

From the practical experiences of chemical and process manufacturers applying available products in new ways

Tooth Paste Tubes Now Air Conditioned

Dry Air Affected Production Schedules and Workers

Problem—Dryers used in processing the metal tooth paste tubes worked effectively in extracting moisture from the product, but in so doing these dryers took the moisture from the factory air, thus affecting production of workers and quality of product. Certain amount of moisture must be maintained in the air for lithographing brilliant colors of tubes. Dryers also distributed unwanted heat to workers during hot summer months.



Solution—With humidity problem important, a "Climate Changer" was installed equipped with humidifiers, a heating coil and filters for the dry room. As outdoor air was used all the time, arrangements were made to pass the cool air over heating coil after which moisture was added. Unit was installed so that cooling coil could be added later.

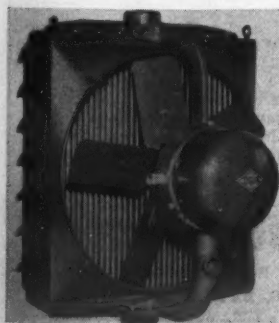
Results—System met the desired plan of maintaining inside conditions of 70 deg. and 40% relative humidity when outdoor temperature was 0 deg. Correct humidity conditions were maintained for best production rate and heat no longer disturbed workers during summer months.

TRANE CO., Dept. CEP, La Crosse, Wisconsin.

When inquiring specify CEP2256 . . . see information request blank, pgs. 16-17

Textile-Type Heaters End "Lint" Problem

Unit Heater Fin Surfaces Not Affected by Lint-Laden Air



Problem—Textile mill operator had problem of heating knitting room in atmosphere containing quantities of lint from machines. Formerly, lint had adhered to fin surfaces and clogged up the coils of unit heaters.

Solution—New textile-type heaters were installed in the knitting room, and were suspended from the ceiling. Heaters had self-cooling motors, thus protecting

the motor from "slow-roasting" — counteracting heat radiated from the coil when fan is idle. These units are made in three sizes for various heating area requirements. **Results**—Problem of lint was entirely overcome. The units were not "blown down" at all during the heating season, and upon shutting them down in the Spring, no lint had accumulated. Heaters have other applications, other than lint, where other substances normally adhere to fin surfaces. Details of operation are shown in "Proof of Result" Bulletin now available.

ILG ELECTRIC VENTILATING CO., Dept. CEP, 2850 N. Crawford Ave., Chicago, Ill.

When inquiring specify CEP2257 . . . see information request blank, pgs. 16-17

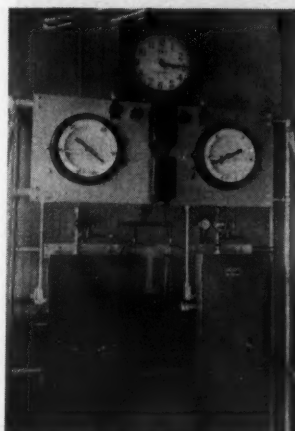
Have You A "New Solution"?

If you have recently solved a problem in chemical process manufacturing, through a new application or new use of your regular products, The Editors invite you to submit the facts for publication in this department . . . in over 25,000 copies. In submitting your "solution" please be sure to give the pertinent facts of (a) the problem, (b) just what was done and (c) what the results were. Send to

The Editors, CHEMICAL EQUIPMENT PREVIEW
737 N. Michigan Ave. Chicago

Explosion Hazard Cut By Gas-Analysis Recorder

Offers Protection Against Inflammable Mixtures of Hydrogen and Oxygen



Problem—Battery manufacturer had problem of explosion hazards in the manufacture of hydrogen and oxygen by electrolysis of water. In such manufacture, a small percentage of oxygen in hydrogen or hydrogen in oxygen results in a dangerously inflammable mixture. Before problem was solved, periodic laboratory tests were only method of guarding against this hazard.

Solution—Gas-Analysis Recorder was installed (see cut). Samples of both O₂ and H₂ enroute

from electrolysis cells, are analyzed by the thermal conductivity method in the metal boxes at bottom of panel; oxygen goes to left and hydrogen to right box. Recorder, above each box, charts per cent of hydrogen in each gas and instrument's black arrow is kept pointed at that figure, where operators can see it.

If hydrogen falls too low in one case or rises too high in the other, recorder does not wait for operator; it closes a relay—a solenoid yanks valve open—and dangerous gas mixture is by-passed. An alarm also sounds. Equip-

(Continued on next page)

REDLER *En Masse* CONVEYING-ELEVATING

... MEANS:

no Dust
no Void Space
no Rough Handling

Minimize Explosion Hazards, Require 1/4 Usual Space, Prevent Material Breakage, Avoid Contamination, Eliminate Feeders and Elevator Pits, Quickly and Easily Erected, Handle Practically Any Required Tonnage—

• Bulk processing materials, food materials and coal are all ideally suited to the many available REDLER conveying elevating shapes (as testified by over 12,000 successful installations).

And when a Stephens-Adamson Engineer recommends their exclusive REDLER, you can be assured that recommendation is unprejudiced, for S-A is also a leading manufacturer of other Material Handling equipment.

The patented REDLER *en masse* principle moves materials in their own bulk, without void spaces.

Find Out How You Can Save With REDLERS—

You can see from new REDLER Catalog No. 140 how each of the many REDLER shapes moves bulk materials. How others take advantage of REDLER designs. Also engineering information and list of representative materials handled.

Write for your free copy now!

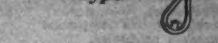
REDLERS MOVE MATERIALS IN CONTINUOUS BULK

REDLERS handle practically any pulverized, granular, small lump and flaky material. Here are a few of many shapes.

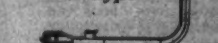
Horizontal—Inclined



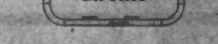
Loop Boot Type



L-Type

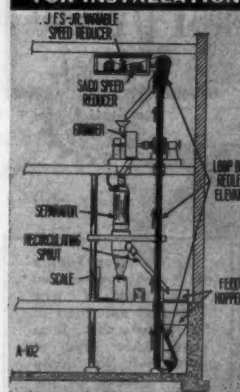


Vertical Closed Circuit



Other shapes or combinations of shapes available to fit all old or new plant needs.

A SIMPLE REDLER LOOP BOOT ELEVATOR INSTALLATION



STEPHENS-ADAMSON

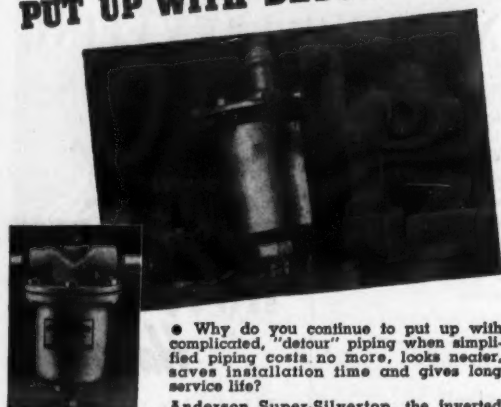
— MFG. CO. —

11 RIDGEWAY, AURORA, ILLINOIS

CONVEYING • ELEVATING • SCREENING • TRANSMISSION

When inquiring specify CEP2258 . . . see information request blank, pgs. 16-17

WHY DO YOU PUT UP WITH DETOUR PIPING?



• Why do you continue to put up with complicated, "detour" piping when simplified piping costs no more, looks neater, saves installation time and gives long service life?

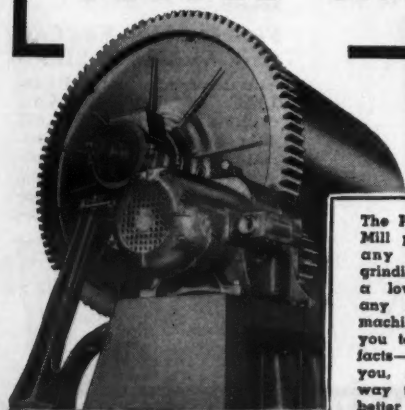
Anderson Super-Silvertop, the inverted bucket trap with simplified piping, is noted for neat, clean-cut installations—straight-in-line piping. It averages more condensate capacity because of larger bucket and longer lever arm. Super-Silvertops are backed by 55 years of steam trap manufacturing experience. Regular inspection is much faster because traps are inspected without disturbing pipe connections. Also, nationwide distribution and experienced field men are assurance of prompt attention and help on trapping problems.

Think about this engineered steam trap—then ask yourself—"Why do I put up with detour piping?" Then decide to do something about it. Send for your copy of "How To Choose A Steam Trap." It's a helpful book of charts, tables and useful information that you can use almost every day. Get your copy and find out more about Anderson Super-Silvertops and simplified piping. Write today.

THE V. D. ANDERSON CO.
1954 West 96th Street • Cleveland, Ohio

When inquiring specify CEP2259 ... see information request blank, pgs. 16-17

GRIND *COSTS* DOWN WITH **PATTERSON** PEBBLE MILLS



The Patterson Pebble Mill performs almost any wet or dry grinding operation at a lower cost than any other type of machine. We invite you to write for the facts—they'll interest you, and point the way to year round better profits!

THE PATTERSON FOUNDRY & MACHINE CO.
EAST LIVERPOOL, OHIO, U. S. A.

When inquiring specify CEP2260 ... see information request blank, pgs. 16-17

New Solutions (Con.)

ment has slight time lag but it is very negligible. Cell of unit is corrosion-proof; chemical dryer, battery, charger, etc., are eliminated.

Results—Explosion hazard was greatly reduced by these continuously operating units. With continuous operation, there was no chance of gas reaching danger point without detection as was the case when periodic laboratory tests only were made.

LEEDS & NORTHRUP CO., Dept. CEP, 4934 Stenton Ave., Philadelphia, Pa.

When inquiring specify CEP2261 ... see information request blank, pgs. 16-17

Proportioning Equipment For Corrosive Fluids

**Air-Actuated Unit Feeds Sulphuric Acid in
Conditioning Boiler Feed Water**

Uses—Designed especially for feeding sulphuric acid in conditioning of boiler feed water, unit is suited for proportioning any corrosive solution such as aluminum sulphate, ferrous and ferric sulphates, etc., to the rate of flow of another fluid. Used for control of alkalinity caused by zeolite softening of water; reduction of pH value in effluent from hot process softeners; control of pH value for prevention of carbonate deposits in cooling systems; feed of coagulants to raw water prior to filtration, etc.

Features—Rate of acid flow is maintained well within one per cent of constant proportion to rate of flow of treated water. Impossible to over-dose because of apparatus failure. No valves or other moving parts are in contact with acid or other proportioned liquid.



Operation—Contact meter in series with a cycle controller operates air compressor inside the proportioner shell when a predetermined flow is reached. Acid is measured into the dilution tank to which dilution water is proportioned by simple mechanism that prevents abnormal chemical concentration, either too high or too low, usually associated with batch feeding. Special feed-line fitting provides for proper introduction of diluted acid or other fluid into the main flow.

Description—Solution tank and measuring tubes are entirely enclosed in cylindrical steel housing, upon which are mounted the pressure reducing valve, air pressure gauge and adjustable valve. Motor driven air compressor is housed within cylindrical base which supports acid tanks. Solution tank, tubing, etc., are lead or lead-lined wherever contact of concentrated sulphuric acid and atmosphere is intermittent, but steel is used for tubes in permanent contact with acid. Other materials may be specified, depending upon service. Publication 2985 gives complete operating details.

COCHRANE CORP., Dept. CEP, 17th St. & Allegheny Ave., Philadelphia, Pa.

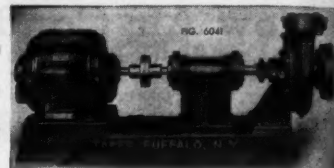
When inquiring specify CEP2262 ... see information request blank, pgs. 16-17

**NOW You Can Save Money This Way
On Your Defense Operations Using**

PUMPS

INVESTIGATE THIS TABER PUMP

**This NEW
"GENERAL-USE"
TABER PUMP
never becomes
obsolete!**



➡ No need to fear pump obsolescence following extra expansion in operations! You can always use the new Taber CLVS Series "General-Use" Centrifugal Pump. Merely change Impeller and Casing to suit the next job! This is not a special-purpose-priced pump... you have these advantages at standard pump cost. Many large processing plants consider these Taber "General-Use" pumps a "find". Built in iron, steel, all castable-machinable alloys to your particular requirements.

**WRITE FOR
New, Helpful
TABER PUMP
Bulletin CLVS-339**

TABER PUMP CO.
ESTABLISHED 1859
320 ELM ST. BUFFALO, N. Y.

When inquiring specify CEP2263 ... see information request blank, pgs. 16-17



Scoop!

"Clark" Power Shovel scoops up a 17-cu. ft. load in 8½ sec., carries it without spilling, dumps at 45 in. height into bin, hopper or car. Cuts the cost of handling foundry sand, fertilizer, raw chemicals, and other loose materials. Gas-powered for 24-hr. continuous operation. Write for "Clark" Shovel Bulletin.

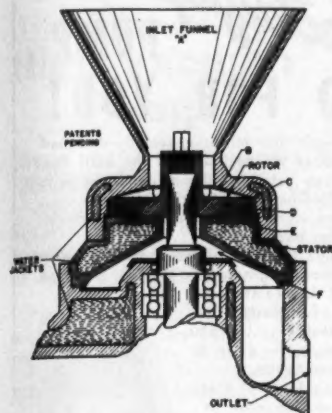
CLARK TRUCTRACOR

Div. of Clark Equipment Co.
153 SPRINGFIELD PLACE, BATTLE CREEK, MICH.

When inquiring specify CEP2264 ... see information request blank, pgs. 16-17

Colloid Mill Has Three-Stage Action

Jacketed Mill; Dis-assembled & Cleaned in 2 to 3 Minutes



Performance—Homogenizations on milk, ice cream mix, etc., produces results comparable or identical to those obtained on other homogenizers using the highest pressures. Colloidal sulphur has been produced of an average particle size of one-half micron in one pass through mill. Paraffine, cotton-seed, kerosene and many other emulsions using both soap and gums as protective colloids have

been produced, absolutely stable,—complete dispersions of carbon black, solids, dyes, colors, etc., have been shown as a result of only one passage through mill.

Features—Triple processing action gives fine dispersion; 2,560,000 clippings of material take place per minute after material has passed through first stage and before coming to final gap space between rotor and stator faces. Very accessible construction permits dis-assembly for cleaning in 2 to 3 minutes. Low motor horsepower per gallon of material processed.

Operation—Machine is of vertical type (see cut). Material is fed downward through funnel "A" and meets impeller vanes "B" on top of rotor traveling at 10,800 R.P.M., which force it to periphery of rotor at pressures as high as 150 lbs. per sq. in. for some materials. Material is sheared at "C" in passing downward between side of rotor and housing (first processing action). Material is then impelled against centrifugal force by pressure of on-coming material through a labyrinth of tight fitting circular rings "D," machined on the bottom of rotor and top of stator (second processing action); and then it is forced across the smooth section "E" between rotor and stator third processing action) and drains from chamber "F" through side discharge outlet without having come in contact with any packing or glands at any time.

Description—Rotor, stator and inlet chambers are bronze; inlet funnel is stainless steel; and housing semi-steel. Jackets are provided in stator and housings for heating or cooling. Easy adjustments meet requirements for handling various materials, and assembly can then be locked in desired adjustment. Machines are available in four sizes with 4", 6", 9" and 12" diameter rotors. Descriptive literature is available on request.

C. O. BARTLETT & SNOW CO., Dept. CEP, 6200 Harvard Ave., Cleveland, Ohio.

When inquiring specify CEP2265 . . . see information request blank, pgs. 16-17

Engineering Data on Boiler Room Instrumentation and Automatic Combustion Control

Three in a series of engineering monographs are presented. No. 1 answers the question of "How Close Can Steam pressure Be Controlled?" No. 2 discusses the question, "Why Operate Automatic Combustion Control From Changes in Steam Pressures?" No. 3 deals with "Adapting Automatic Combustion Control to Characteristics of Underfeed Stokers." Monographs are in pamphlet form and contain drawings of specific points. These pamphlets are available on request.

HAYS CORP., Dept. CEP, Michigan City, Ind.

When inquiring specify CEP2266 . . . see information request blank, pgs. 16-17

WE COMBINED 500 MAN-YEARS OF RESEARCH
WITH 62 YEARS OF MOTOR EXPERIENCE . . .

to build this
NEW MOTOR



THE Tri-Clad motor is a completely new design and it's built to industry's own specifications. After five years of field investigation to find out what industry wanted in a motor, G-E engineers and designers started afresh. They took full advantage of new synthetic insulating materials, new close-tolerance manufacturing methods, and new, better ways to utilize active materials—and they built a greatly improved general-purpose motor with *protection* as the top-ranking "plus" factor. We call this motor "Tri-Clad" because it gives you extra protection in three basic respects.

No other standard motor, we believe, has ever met the general-purpose requirements of industry with so well-balanced a combination of performance characteristics, convenience features, and provisions for protection. As a safeguard against production interruptions, as a prime factor in lowering costs, as an extra increment of value on machines you build, you'll find that the new G-E Tri-Clad motor means extra profit-protection, too.

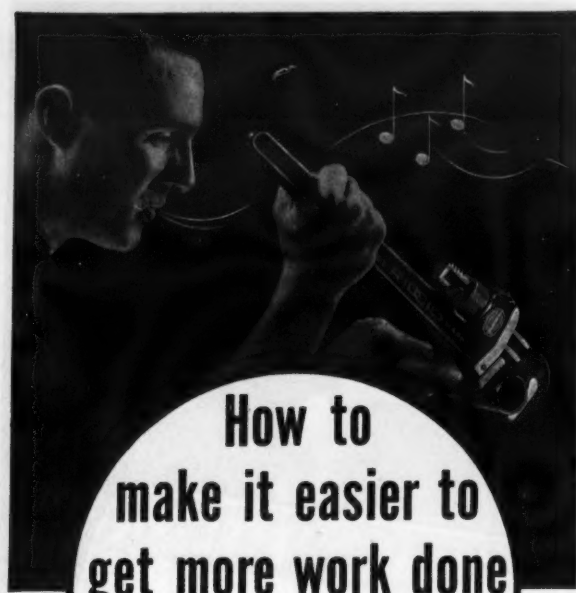
Sizes now available are 1, 1½, 2, and 3 hp—larger sizes later. General Electric, Schenectady, N. Y.

- 1 Extra Protection
against physical damage . . .
- 2 Extra Protection
against electrical breakdown . . .
- 3 Extra Protection
against operating wear-and-tear . . .

GENERAL  ELECTRIC

750-30

When inquiring specify CEP2267 . . . see information request blank, pgs. 16-17



How to
make it easier to
get more work done
in 1941

...Easier-working
RIGID
Pipe Wrenches save
drudgery and time—
and cut your costs!

THE country-wide demand this year is to produce more and faster. You can do your share, without extra strain on your men, by use of tools that save effort—like **RIGID** Wrenches. The full-floating chrome molybdenum jaws grip without slipping, let-go without jerk. Pipe scale on hookjaw means quick-setting to pipe, adjusting nut in open housing spins easily in all sizes, 6" to 60". Comfort grip alloy I-beam handle, whole tool is balanced for effortless work. And that guaranteed housing practically ends waste of time and money making repairs. Get the work done but protect your men—buy **RIGID**s at your Supply House... today!

THE RIDGE TOOL CO., ELYRIA, OHIO

RIGID
WORK-SAVING PIPE TOOLS

When inquiring specify CEP2268... see information request blank, pgs. 16-17

Fire Extinguisher Indicator Cabinet

Used in Unheated Locations; Prevents Vandalism;
Shows Location

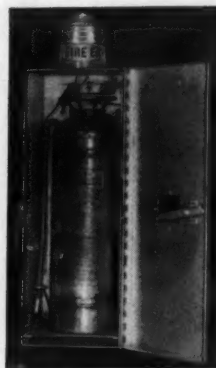
Uses — Replacing the makeshift wooden box (with ordinary lamp bulb for heat), new cabinet can be used in exposed locations and unheated buildings for extinguishers of the soda, acid and foam types.

Features—Indicator cabinet provides against freezing in unheated locations. Locking device provides easy entrance for authorized employees for checking and servicing extinguisher. "Glow-lite" lens on top of cabinet makes location of fire extinguisher visible several hundred feet. Rod in extinguisher nozzle automatically clears nozzle when extinguisher is removed from cabinet.

Description—Cabinet is supplied for wall mounting, accommodating a standard 2½ gallon size; cabinet measures 10" wide, 28" high (including Glowlite) and 9½" deep. Two extinguisher size also available. Glowlite can be furnished in either red or yellow; 10 or 25 watt standard lamp for normal lighting locations and a 3 watt vapor lamp for poorly lighted locations. Each cabinet can be equipped with Chromolax heating unit having longer life than ordinary lamp bulb. Switch is provided for turning on heater by authorized individual.

LINTERN CORP., Dept. CEP, 7960 Lorain Ave., Cleveland, Ohio.

When inquiring specify CEP2269... see information request blank, pgs. 16-17



Constant Weigh Feeder

Feed Rate Adjustable Down to Ounces Per Hour

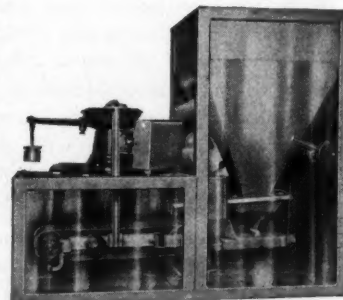
Uses — Constant weigh flow feeder machine for feeding very small amounts of bleach, malt, phosphate and other dry chemical reagents in a continuous stream to an exact accuracy by weight.

Description — Machine is made up of a hopper, hopper vibrator, vibrating feeder and constant speed belt conveyor and scale, all enclosed in a cabinet. Synchronous motor drive, constant speed belt conveyor is suspended from the scale, and scale is equipped with a very sensitive electric valve that is actuated by an over- or under-weight movement of the scale beam. Rate of feed, in down to ounces per hour, is set by the poise on the scale beam.

Operation—Electric valve controls the electrical energy going into the vibratory feeder, which discharges the material from the supply hopper onto the belt conveyor. Consequently, a constant load is automatically maintained on belt conveyor, inasmuch as under any under-weight movement of the scale beam would instantly speed up the discharge from the vibrating feeder and, vice versa, any over-weight movement of scale beam would instantly slow down discharge from feeder.

SYNTRON CO., Dept. CEP, 110 Lexington Ave., Homer City, Pa.

When inquiring specify CEP2270... see information request blank, pgs. 16-17

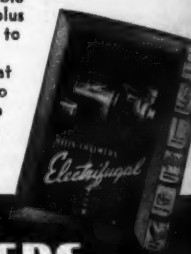


FIND OUT WHAT THE NEW *Electrifugal* PUMP CAN DO FOR YOU!

It's new! It's a pump unit with motor especially designed for pump drive... as an integral part of the unit! Yes, for the first time you can get this efficient combination in the new all-in-one Allis-Chalmers Electrifugal Pump... now ready to give you more efficient pumping performance than you have ever had before.

Look at these extra-value features: Single shaft and frame for both pump and motor—greater rigidity in all-in-one design. Splash proof Lo-Maintenance Motor combination of indestructible rotor, distortionless stator... plus bronze-fitted pump parts — adds to longer life, lower maintenance.

These are money-saving features that mean more gallons at less cost to you! But there are more. Get the full story of the Allis-Chalmers Electrifugal by sending for Bulletin B6140 today!



ALLIS-CHALMERS
MILWAUKEE-WISCONSIN

When inquiring specify CEP2271... see information request blank, pgs. 16-17

YOU TRY IT



Let LUBRIPLATE prove itself on the job that is giving you the most lubrication trouble.

Write For Demonstration At Our Expense

There is a LUBRIPLATE field engineer near you. Write us and we'll have him call on you. Then, give him the toughest lubrication problem you have. He will give you a trial quantity of the proper type of LUBRIPLATE. The results will convince you that LUBRIPLATE is a better lubricant.

LUBRIPLATE DIVISION
FISKE BROTHERS REFINING COMPANY
NEWARK, N. J. TOLEDO, OHIO

LUBRIPLATE
THE MODERN LUBRICANT
THAT ARRESTS PROGRESSIVE WEAR

When inquiring specify CEP2272... see information request blank, pgs. 16-17

7 FACTS ABOUT LUBRIPLATE

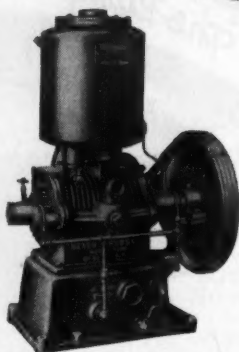
1. Produces ultra-smooth, wear-resisting bearing surface.
2. Reduces friction — lowers maintenance and power costs.
3. Resists rust, corrosion, pitting.
4. Assures clean lubrication.
5. Outlasts ordinary lubricants many times.
6. Economical — a little goes a long way.
7. Available in fluid and grease types for every need.



Get Higher Vacuum for Better-Faster Processing

BEACH-RUSS Type RP-Single Stage High Vacuum Pump

Gives 90% Volumetric Efficiency from atmosphere to 3 m.m. vacuum despite severe operating conditions at pump speed of only 200 R.P.M.



For better evaporating, drying, recovery and other processes, you can improve product quality, cut time and increase safety with the Beach-Russ Type RP Pump. You get all the advantages of sustained higher vacuum with highest volumetric efficiency at low power cost.

For processes where moisture is present, this pump is built of corrosion resistant metals and embodies the exclusive, combined Beach-Russ high-vacuum features of broad sealing, rotary design and water-oil separation, not embodied in pumps of other design. Moreover, the unusually slow speed of 200 R.P.M. assures quiet, vibrationless operation and extra long pump life.

Sizes from 15 to 750 C.F.M. and larger for wet or dry vacuum processes.

Write for Bulletin No. 72.

BEACH-RUSS COMPANY 40 Church St. NEW YORK

When inquiring specify CEP2273... see information request blank, pgs. 16-17

68 out of 78 Clevelands



In a world-famous Process Plant, 68 out of 78 Cleveland Worm Gear Units are of one standard type.

Since 1927, they have been installed on many kinds of machines, including this one for bonding lead-oxide paste to retaining grids.

Throughout the Process Industries, thousands of Clevelands—various standard types—are insuring continuous

operation and top production on all types of machines. We will be glad to send a Representative. The Cleveland Worm & Gear Company, 3257 East 80th Street, Cleveland, Ohio.

Affiliate: The Parval Corporation, Cleveland, Manufacturers of Centralized Systems of Lubrication

In Canada: PEACOCK BROTHERS LIMITED

CLEVELAND Speed Reducers

When inquiring specify CEP2274... see information request blank, pgs. 16-17

"Auto-Raise" Thickener Scrapers Automatically Raised When Overload Occurs

Uses—For separating mixture of liquids and finely divided solids in tanks, basins, etc.; dewatering pigments ahead of filters, washing pigments to remove occluded solubles, thickening lime sludge in caustic soda manufacture, etc.

Features—"Auto-Raise" mechanism on this thickener prevents unpredictable overloads from twisting or breaking off shaft of scrapers. Mechanism automatically raises scrapers away from obstructions or overload of pulps in bottom of tank, no matter where overload occurs—in center of tank or at tips of scraper. Unit also has overload alarm and power cut-off switch for use when scrapers are raised near maximum position.

Operation—Main drive gear or worm of "Auto-Raise" mechanism rotates a slotted tube. Slots are set at an angle. Torque tube or hollow shaft supporting scraper is driven by rollers fastened to tube. Pitch of slots is such that when obstruction in tank bottom exceeds predetermined loading, rollers carrying torque tube roll up the incline, thus raising torque tube and scrapers until pressure is lessened. Rollers and torque tube will remain in raised position as long as pressure continues.

Description—Various types of thickeners are made for circular rectangular, square tanks, etc. Scrapers used in circular tanks are either double spiral or of cut flight construction. Support structure for thickener mechanism for circular, medium-size tanks is usually an I-beam placed across tank. Structural steel superstructure is sometimes used on larger tanks. Specifications for various types of units are provided in Bulletin No. 31-C.

HARDINGE CO., INC., Dept. CEP, York, Pa.

When inquiring specify CEP2275... see information request blank, pgs. 16-17

Millivoltmeter Type Pyrometers

The constructional features and operating advantages of this manufacturers indicating, recording and control millivoltmeter pyrometers are will illustrated and described in this new 42-page catalog. Large, clear photographs show the different types of instruments... a wide variety of applications are discussed. Also it contains illustrations and descriptions of portable pyrometers as well as other types. Well designed, the booklet is printed in two colors for greater clarity. Available on request. BROWN INSTRUMENT CO., Dept. CEP, Wayne & Roberts Aves., Philadelphia, Pa.

When inquiring specify CEP2276... see information request blank, pgs. 16-17

NEW APPLICATIONS FOR FILTERING AND SCREENING PROCESSES

Up-to-date in every respect... designs, materials, machines, men... Multi-Metal can provide the right answer for your filtering and screening problems.

Right in stock we carry the largest selection of weaves, metals, alloys you will find anywhere. And, in case something "special" or "difficult" is needed, our unrivalled facilities for fabricating wire and screen assemblies can provide the right answer. For cleaner filtrates, faster thru-puts, reduced filter fabric costs, get in touch with us. You can count on quick response and intelligent co-operation, plus results that are highly efficient and economical.



Special drum type filters. 25' Diameter "Single-disc" shown at right is one homogeneous fabric.

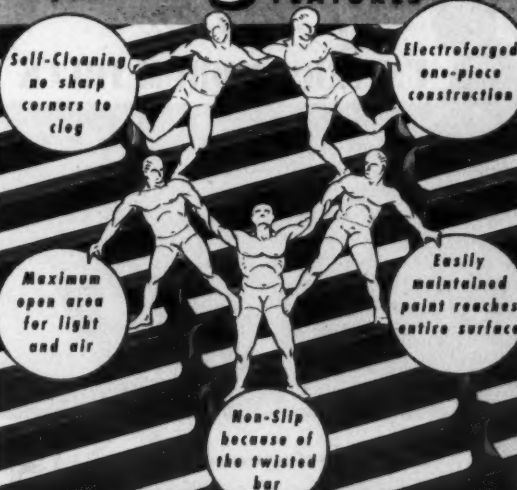
MULTI-METAL
WIRE CLOTH COMPANY

INCORPORATED
7307 GARRISON AVE. REGINA 30RD, N.Y.

When inquiring specify CEP2277... see information request blank, pgs. 16-17

BLAW-KNOX GRATING

PRESENTS 5 SUPERIOR FEATURES



Send for FREE paper weight size sample

BLAW-KNOX DIVISION of Blaw-Knox Co.
2076 FARMERS BANK BUILDING - PITTSBURGH, PA.

NAME _____
STREET _____
CITY _____ STATE _____

When inquiring specify CEP2278... see information request blank, pgs. 16-17

Equipment
for

SORTING

GRADING

SIFTING

BOLTING

CLEANING

CLASSIFYING

SEPARATING

POSITIVE PROFITS
depend on **POSITIVE**
PRODUCT UNIFORMITY!

● For separating and grading particles — large or small, fine or super-fine, fibrous or granular — Sprout-Waldron offers a complete and balanced line of modern machines.

● Our bolting reels, revolving and reciprocating screens, vibrating sifters and air separators can guarantee the profits which depend on absolute product uniformity in YOUR process.

Tell Us Your Problem . . .
Our Recommendations Will
Cost You Nothing.

Sprout-Waldron & Co., Inc.

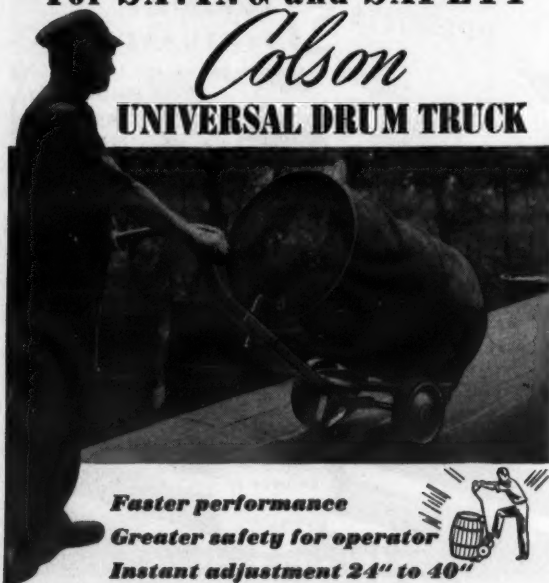
181 Sherman Street
Muncy, Pa.

Since 1866

Manufacturing Engineers

When inquiring specify CEP2279 . . . see information request blank, pgs. 16-17

For **SAVING** and **SAFETY**
Colson
UNIVERSAL DRUM TRUCK



Faster performance

Greater safety for operator

Instant adjustment 24" to 40"

Rubber-tired or semi-steel wheels

THE COLSON CORPORATION

LYNCH, OHIO

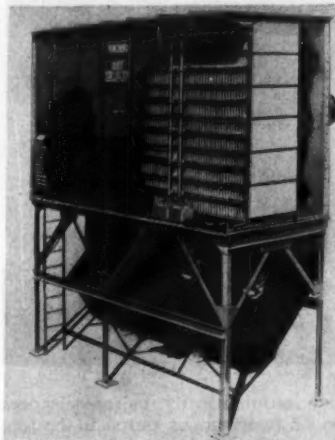
Offices and Agencies in Principal Cities



When inquiring specify CEP2280 . . . see information request blank, pgs. 16-17

All Metal Cloth Screen Dust Collector

Wire Mesh Screen Frames Prevent Cloth
Collapse Under Air Load



Features—Individual screens can be quickly removed without disturbing adjacent screens, rapping device or casing sheets. All moving parts are on the clean air side, out of dust, eliminating wear. Rapping device operating on clean side of cloth beats dust outward rather than into cloth pores; no direct contact between rapping device and cloth to cause wear.

Operation—(See cut showing cut-away

photo of clear air side). Dust-laden air enters at rear (dust side) of collector where, striking a baffle plate, a reduction in velocity occurs, dropping heavier particles directly to hoppers. Finer particles are conveyed to dust side of cloth screens, retained thereon, the cleaned air filtering through the cloth, passing out through the clear air end of the screens into the clear air chamber and exhausted through outlet.

Description—The all steel, rust-proof wire mesh frames, inherently electrically grounded, prevent cloth collapse under air load. Cloth filter bag of simple design is applied to frame without tension or strain. Unit construction permits unlimited flexibility. The fully enclosed screen rapping mechanism runs in oil and is operated by multiple V-belt drive. There are no obstructions on dust sides of cloth to prevent accumulated dust from dropping freely to hoppers. Built integrally with collector casing is an extended fan house enclosing exhaustor and motor. Bulletin No. 903 contains complete details.

PANGBORN CORP., Dept. CEP, Hagerstown, Maryland.

When inquiring specify CEP2281 . . . see information request blank, pgs. 16-17

"Bulkbinding" Truck

Takes Steel Strapping Equipment to Operations
Point

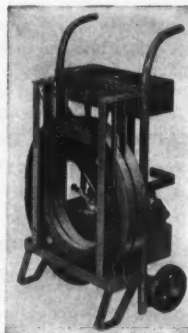
Uses—Used in bulkbinding operations for transporting coils of steel strapping and application tools for points of operation.

Features—Steep strap coil cradles are adjustable for various widths of strapping and will accommodate three sizes at the same time. Each size may be dispensed independently, or any combination can be dispensed simultaneously. Design of cradles and rollers reduces effort required for dispensing steel strap and eliminates all back-lashing.

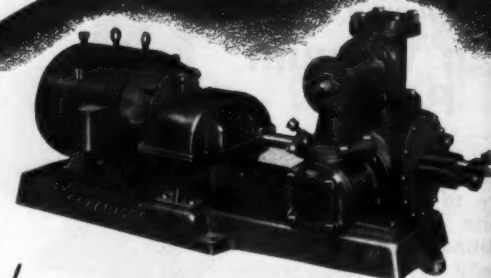
Description—Roller bearing, rubber-tired wheels are used for quiet operation, easy rolling and floor protection. 7" diameter wheels are used for normal usage, but 12" wheels are provided for applications where strap and tools must be transported over rough ground, railroad tracks, etc.

SIGNODE STEEL STRAPPING CO., Dept. CEP, 2607 N. Western Ave., Chicago, Ill.

When inquiring specify CEP2282 . . . see information request blank, pgs. 16-17



The Pump that Repairs Itself



Actually BLACKMER ROTARY PUMPS
with bucket design rotor
Automatically Take Up Wear

A few of the liquids
that are being han-
dled by Standard
Blackmer Pumps.

acids
alcohols
ammonia
caustics
coal tar
glycerine
fruit juice

bleaches
naphtha
yeast
paint
paraffin
soaps
syrups

There is no loss of efficiency during the life of the buckets. A few dollars and 15 minutes time will replace worn buckets and you again have a new pump. 20 years continuous operation is a common record for Blackmer Pumps. What would this saving mean in your plant? Call the Blackmer office in your city or write the factory for information.



BLACKMER PUMP COMPANY

1841 Century Ave., S.W., Grand Rapids, Mich.

When inquiring specify CEP2283 . . . see information request blank, pgs. 16-17

STOP Liquid Splashes-Sparks
Flying Particles--

with this

2-WAY DEFENSE PROGRAM

★ There is no "give" in this Cesco No. 750 General Utility Face Shield, which accounts for its ability to "take" and shut off splashes, sparks and flying particles in the chemical process and metal fabricating industries. Extremely light in weight, with entire window metal bound for added strength and rigidity.

**CESCO No. 750
FACE
SHIELD**

enables its wearer to proceed aggressively, confident of working with the utmost in face and eye protection and comfort.

CESCO No. 92 RESPIRATOR

EXACTLY what you need on operations where Type A, Silica, Lead and Nuisance Dusts endanger health and reduce working efficiency. Use this Cesco No. 92 Respirator with its 45 sq. in. filter area and COMFORT features suited to every climatic and working condition. Promotes much easier breathing . . . clear vision . . . activity!

Write for Descriptive Circulars, Prices, and Full Details. No obligation. Act Today!

CHICAGO EYE SHIELD CO.

2337 Warren Bldg.
Chicago • Ill.

When inquiring specify CEP2284 . . . see information request blank, pgs. 16-17

Automatic Rotary Bottle and Container Cleaner

Cleaning Time Doubled At Normal Operating Speed



Uses—Cleaner will handle wide variety of types and styles of containers, regardless of their construction. Filling openings may vary from smallest AGST finish to largest wide mouth finish. For removing carton lint, dust, dirt, and foreign materials which have accumulated during packing

and shipping of new glassware and containers.

Features—Double acting stations permit each container to make two complete revolutions for each single revolution of machine, thus doubling cleaning time. Less than 10 minutes required for most complicated change from one size of container to another. Design is compact. Constant motion in one direction for inverting containers, inserting air cleaning tube, cleaning containers and removing cleaning tube eliminate intermittent motions and give smooth performance. Slow moving parts provide long life.

Description—Unit uses compressed air blast at pressures of from 50 to 90 lbs. per sq. in. as cleaning medium. Production is variable from 40 to 150 per minute. Cleaning of containers is done in an inverted position and foreign matter blasted from inside can be collected by independent exhaust system. Drive control permits almost instant selection of any predetermined operating or output speed.

U. S. BOTTTLERS MACHINERY CO., Dept. CEP, 4028 N. Rockwell St., Chicago, Ill.

When inquiring specify CEP2285 . . . see information request blank, pgs. 16-17

Terpene Polymer Resin

Compatible With Paraffin, Natural & Mineral Waxes

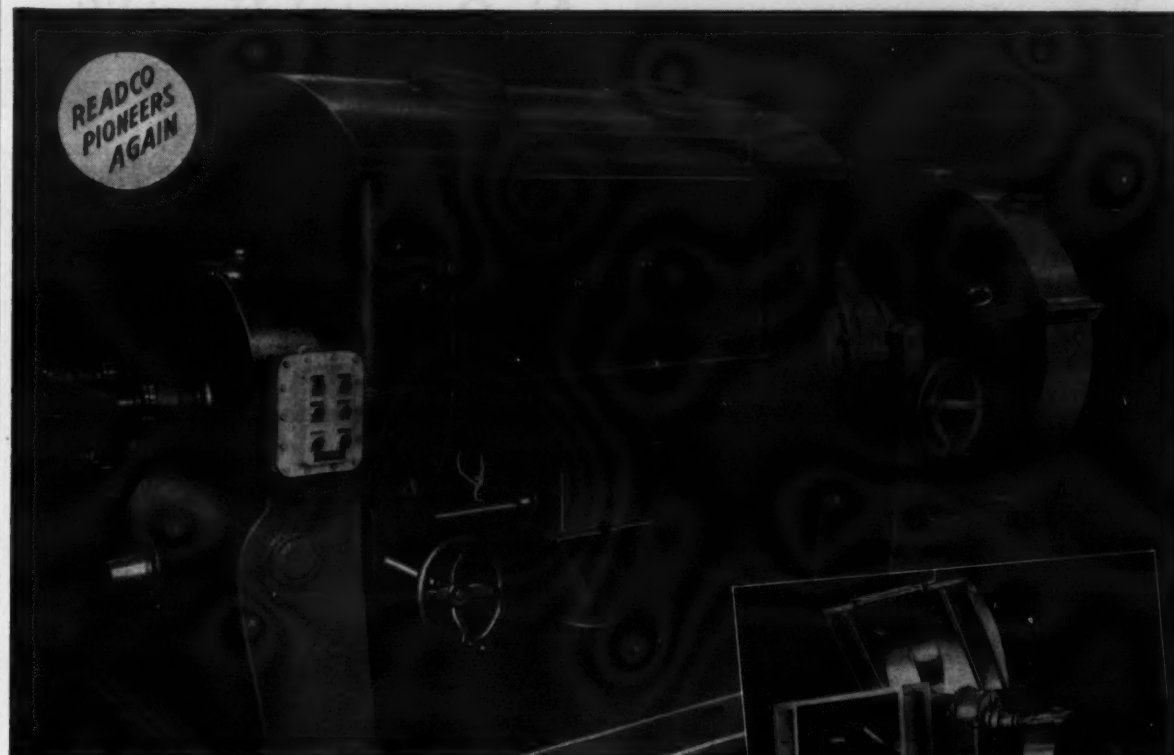
Uses—Useful for alcohol resistant coatings in conjunction with Pliolite; neither of these materials was affected by nine days exposure to denatured alcohol. As a solution or cut-back, new resin imparts initial tack to latex. Blended with 60% rubber, resin behaves as a pressure sensitive adhesive, suitable for most jobs except rubber to rubber.

Features—Resin is known as "Nypene" resin. Has a high melting point, pale color and low ash; it is natural, non-saponifiable; resistant to water, acid and alkali; compatible with paraffin, natural and mineral waxes; and has exceptional softening action on rubber.

Description—Originating from turpentine, Nypene differs from rosin in that it is strictly a hydrocarbon structure. Material is odorless when cold, and has a clean, sweet terpene odor when melted. Specific gravity is 0.98. Material is permanently thermoplastic and shows good heat stability. Active depolymerization occurs between 320 and 360 deg. C. Even at temperatures of 400 deg. C., resin remains clean and no coke is formed. Melting point is 140-150 deg. C.; color is 1 to 2-1/2; ash is less than 0.05%; acid number is 1.0 maximum; bromine number is 95 to 100; and approx. mean molecular weight is about 1600. Complete details and samples available.

THE NEVILLE CO., Dept. CEP, Neville Island, Pittsburgh, Pa.

When inquiring specify CEP2286 . . . see information request blank, pgs. 16-17



Double Arm Vacuum Mixer now equipped for Both Bottom Discharge and Tilting Bowl

Here again READCO engineers have taken the initiative in developing a full Vacuum, Double Arm, Single Packing Gland Mixer equipped with tilting bowl for dumping heavy compounds and with liquid-tight plug valves for bottom discharge of liquid or granular materials.

TILTING BOWL

READCO builds these Mixers with large diameter trunnions located concentric to the front arm shafts to assure maximum bowl support and minimum wear. The bowl is tilted by means of a torque motor controlled by a push button and limit switch. The bowl cover is supported in an eccentric trunnion bearing to provide means for adjusting cover position.

BOTTOM DISCHARGE

Two flush liquid-tight plug valves are welded to the outside bowl assembly for bottom discharge of liquid or granular material. The discharge spouts may be built to form a positive seal against a screw conveyor housing or other receptacle, thereby eliminating all possibility of dusting while discharging.

Write for a READCO Chemical Equipment Catalog.

These Mixers feature Single Packing Gland construction—no gland adjacent to mixing chamber, thus eliminating any possibility of contamination. Furthermore, due to vacuum chamber design, it is impossible to draw any air or gas through the mix, thereby eliminating any possibility of air entering the mixed product. Heavy mixing bowl; close clearance agitators; and an adjustable vacuum cover are provided. Built in working capacities from 2.5 to 400 gallons, of common metals or special alloys.



READ MACHINERY CO., INC.,
YORK · PENNSYLVANIA

When inquiring specify CEP2287 . . . see information request blank, pgs. 16-17

ARE SACRIFICES Slowing Your Production?

"BETTER BUILT"
Porter Process Equipment



Double Cone Blender

It is more than convenient—it is necessary these days to use process equipment that will not break down. That's why plant engineers everywhere are recognizing Porter Process Equipment—engineered, designed and built to give efficient, dependable operation.

PORTER DOUBLE CONE BLENDERS are designed for mixing and blending dry powders and crystals into homogeneous mixes of exact proportions. Anti-friction bearings, integral drive and bearing support stands.

PORTER PROCESS KETTLES are available in all types and sizes. Plain, stainless, or stainless-clad steels. Properly engineered and constructed to A.S.M.E. code, for long, efficient service.

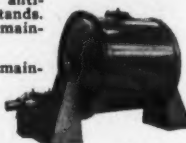
PORTER BALL AND PEBBLE MILLS are built with rolled steel gears, all steel heads, anti-friction bearings, welded steel motor drive stands. Many other features assure low power and maintenance costs.

All of this Porter equipment can help you maintain steady production in your plant—it won't break down when the going gets hard. For complete information, write to H. K. Porter Co., Process Equipment Division, for our new bulletin P-41.

"If it's PORTER-BUILT it's BETTER BUILT"



Process Kettle



Ball Mill

H. K. PORTER COMPANY, INC.
PITTSBURGH • PENNSYLVANIA

"Where the Famous PORTER LOCOMOTIVES are built"

When inquiring specify CEP2288... see information request blank, pgs. 16-17

WHEN YOU need VALVES

Particularly iron-body disc,
regrinding, gate designs

WE HAVE PUBLISHED A 16-PAGE POCKET FOLDER CONTAINING DATA TO HELP YOU IN SELECTION WHEN YOU WANT VALVES FOR ANY GIVEN SERVICE.

The folder covers iron-body, bronze-seat construction in disc, regrinding; globe, angle, swing-check, lift-check, blowoff, non-return and gate designs of double-disc, solid-wedge, quick-opening, and U-bolt assemblies in 1/4 to 24-in. sizes for 125 to 250-lb. service.

The folder shows the valves in cutaway views, describes each one briefly, includes a reference chart to names and sizes and a guide to help you make disc selection for services including steam, hot and cold water, air and gas, oil, gasoline, acids, alkalis, alcoholic beverages, industrial solvents.

Ask for Bulletin 185—JENKINS IRON VALVES

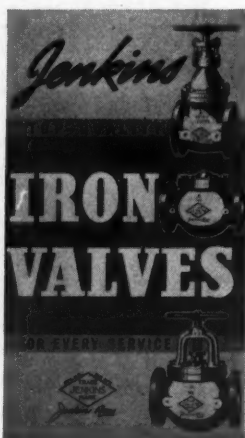
JENKINS BROS.

80 WHITE STREET

NEW YORK, N. Y.

Bridgeport, Conn. Boston Chicago Philadelphia Atlanta Houston
JENKINS BROS., Ltd., Montreal; London, England

When inquiring specify CEP2289... see information request blank, pgs. 16-17



Air-Operated Humidifier For Use In Hazardous Atmospheres

Uses—Air-operated, steam type humidifier for installation in locations where electric circuits would be undesirable. For such uses as chemical and processing plants using inflammable solvents, powder plants, milling plants having dust explosion hazards, etc.

Operation—As shown in cut, assembly includes a pneumatic hygrostat which acts as a pilot valve to admit pressure to diaphragm chamber of main air valve when relative humidity drops below the desired percentage. Opening of main air valve allows compressed air to flow to humidifier when pressure builds up and opens steam valve in top of humidifier. Steam valve admits steam to special silencing chamber in humidifier from whence it escapes directly to atmosphere to add humidity to room. Circulation and distribution of steam is aided by allowing small amount of compressed air to blow through a nozzle directly above the steam outlet.

Description—Compressed air for humidifier may be at any pressure from 20 to 100 lbs. or less. Use of steam trap prevents accumulation of condensate in steam jacket. To insure dryness of steam released by humidifier, entire silencing chamber is jacketed with steam at pressure of several pounds above atmosphere. Unit has a maximum capacity for adding moisture to air at rate of 44 lbs. per hour. Under average conditions this is sufficient for 40,000 cu. ft. of space.

ARMSTRONG MACHINE WORKS, Dept. CEP, 880 Maple St., Three Rivers, Michigan.

When inquiring specify CEP2290... see information request blank, pgs. 16-17

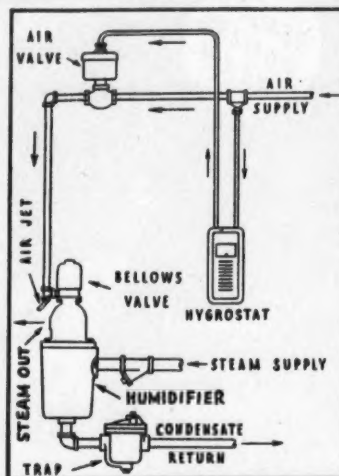
54 Lb. Centrifugal Pump Automatic Governor Speeds Motor When Pump Catches Prime

Uses—Applications include pumping water from excavations, keeping seepage levels, low, etc.

Features—Light weight pump for portable use—weighs 54 lbs. Engine has automatic governor that speeds up motor when pump catches its prime and starts to lift water, thus eliminating possibility of putting too much strain on power unit at low speeds.

Description—3000 GPH pump has large semi-steel recirculating water chamber equipped with aluminum cap to save weight and is powered by an easy-starting, single cylinder, air-cooled engine of 3/4 to one horsepower. Design includes a "peeler"—a device that "peels" the air from the whirling impeller and speeds up the prime. Overall dimensions are 15-3/4" long, 11-3/4" wide by CHAIN BELT CO., Dept. CEP, Milwaukee, Wisconsin. 15-3/4" high.

When inquiring specify CEP2291... see information request blank, pgs. 16-17



Specify GOODALL "FLANG-LOK" Ends

With "KEMITE" DUCT or
"GOODITE" Flexible Rubber Pipe
For Conducting Abrasives and Acids

Safe, dependable, economical. Full flow. No gaskets. No metal contact with material or fluid. Tight, leak-proof rubber-to-rubber connection. Great flexibility permits easy installation and handling.

Write for Illustrated Folder.

GOODALL RUBBER CO., Inc.
3 South 36th Street, Philadelphia

Branches and
Distributors
from Coast
to Coast.

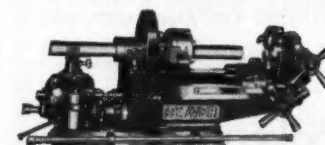
GOODALL
MECHANICAL RUBBER
INC.

MILLS: TRENTON, N. J.

EST. 1873.

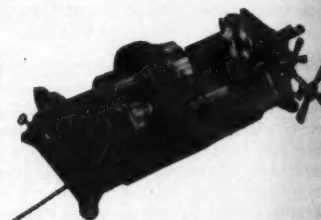
When inquiring specify CEP2292... see information request blank, pgs. 16-17

Immediate Delivery!

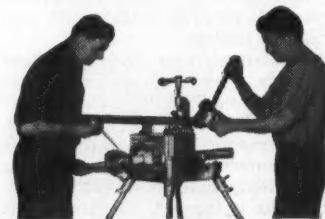


Beaver Model-A
A high-speed heavy-duty deluxe Pipe and Bolt Machine. Range 1/2 to 2-inch—up to 13-inch with geared tools and drive shaft. Bolts 1/4 to 2-inch. From \$309.50 up. Wt. 415 lbs. Ask for Bulletin-A.

Beaver Model-B
A light-weight utility Pipe and Bolt Machine combining many features of Model-A with the easy portability of Model-C. Range 1/4 to 2-inch—up to 8-inch with drive shaft and geared tools. Bolts up to 1 1/2-inch. Weight 280 lbs. From \$217.50 up. Ask for Bulletin-B.



Beaver Model-C
A sturdy little Power Unit Converts Hand Pipe Tools into Power Tools from 1/4 to 8-inches. Threads 8-inch in 6 minutes. Threads bolts up to 1 1/2-inch. Equipped with automatic chuck wrench ejector—a safety feature. Two men can use it at the same time without interference. Easily portable—weighs about 150 lbs. From \$125.00 up. Write for Bulletin-C.



BEAVER
PIPE TOOLS
Highest Quality • WARREN, OHIO • For 40 Years
141 REVIEW AVENUE

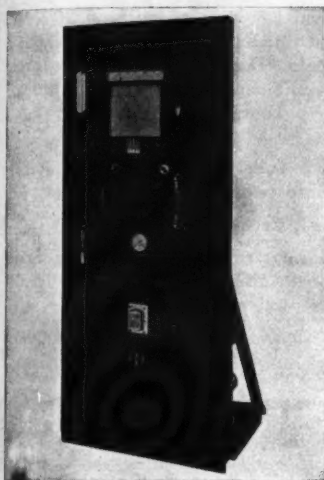
When inquiring specify CEP2293... see information request blank, pgs. 16-17

INSTRUMENTS OF CONTROL

*New developments in control instruments
for Production . . . for Laboratory*

Oxygen Recorder

Measures & Records Oxygen Concentrations
from 0 to 20.8%



Uses—For measuring and graphically recording oxygen in other gases. Used in chemical plants to control oxygen content in processes where excessive oxygen might cause explosion; by refining industry to measure oxygen in atmospheres of hydrogen used in petroleum hydrogenation; by utilities and steel mills to measure oxygen content of natural, coke-oven and blast furnace gases.

Features—All parts of recorder are assembled on steel panel, 30" wide by 7 ft. high. All conductors carrying sample and solution are hard rubber; clear plastics are used instead of glass where transparency is required; electrical control box excludes corrosive gases; all 110-volt conductors and electrical parts are enclosed in explosion-proof fittings; and carbon dioxide and other acid gases can be removed from interference with operation, when necessary, by a caustic scrubber.

Description—Instrument measures oxygen concentrations from 0 to 20.8% and can be calibrated for any range desired within these limits; unit is supplied with specially-designed and calibrated recording potentiometer. Small diaphragm-type pump is used for circulating the solution through the absorption tower of caustic scrubber. Similar pump is used for continuous recirculation of electrolyte through analysis cell. Both pumps are driven by ¼ H.P. explosion-proof motor which also revolves the positive electrode analysis cell. Complete details in Bulletin No. DW-2.

MINE SAFETY APPLIANCES CO., Dept. CEP, Braddock, Thomas & Meade Sts., Pittsburgh, Pa.

When inquiring specify CEP2294 . . . see information request blank, pgs. 16-17

Auto. Interval Timers

Has Slow-Speed, Self-Starting Synchronous Motor

Uses—For timing or controlling automatic heating units, air-conditioning equipment and wide variety of industrial process machinery which must be accurately timed in split seconds, seconds, minutes or hours. Applications include variable speed motors, heat-treating and baking ovens, plating and welding rigs, conveyors and elevators, etc.

Features—Timers are operated by slow-speed, self-starting synchronous motor—no clock works or ticking escapements to get out of order. Gives accurate and dependable control of electric circuits on a timed basis. Units are not



affected by vibration. Can be used to open or close a circuit, make momentary contact, repeat present schedule of contacts, or reset upon power failure. Have fast-acting, silver contact micro-switches.

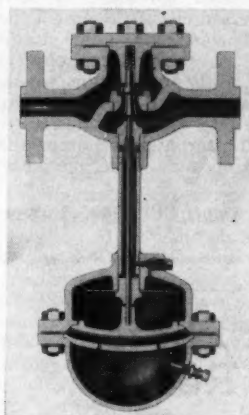
Description—Small, compact design, finished in "thermostat gray." Manual and automatic reset models are available in built-in flush panel mounting, enclosed surface mounting or wall mounting. Underwriters approved for 10 Amp. 115-volt, of ½ H.P. direct load. Manual reset types are set by revolving bakelite pointer away from zero to desired time; circuit is opened, closed or reversed at preset time. Automatic reset types operated by push button. Settings can be made between ¼ second minimum and 9-¼ hours maximum.

PARAGON ELECTRIC CO., Dept. CEP, 37 West Van Buren St., Chicago, Ill.

When inquiring specify CEP2295 . . . see information request blank, pgs. 16-17

Pressure Regulator

Easy Loading; No Springs, Weights, Stuffing Box



Uses—Regulator is of air dome-loaded design for accurate regulation of high and low pressure control of hot fluids, whether steam, liquids or gases. Applications include those in power and process plants, refineries, paper mills, rubber factories, packing plants, etc., where extreme accuracy of regulation is required under rapidly and widely varying loads, and more especially on high single-stage pressure reductions.

Features—Constant air load in dome assures sensitive regulation. Simple setting for wide range of pressures. Has no springs or weights to adjust. Operates without

hunting or chattering. Diaphragm is shielded from differential pressure stress. Minimum of moving parts, no large sliding surfaces or side thrusts, and no stuffing boxes to bind or pack. All parts are accessible and renewable without removing body from line. Regulation accuracy is unaffected by spring deflection and hysteresis.

Performance—Initial pressures up to 2500 lbs. per sq. in.; delivery pressures up to 1200 lbs. per sq. in.; temperatures up to 1000 deg. F.

Operation—Dome is loaded with air pressure equal to desired reduced or service pressure to hold diaphragm up and main valve open. Medium then flows through to outlet side, its pressure being communicated through the pilot line and down the water leg through port into the diaphragm chamber and onto the diaphragm. When adjusted outlet pressure is reached, its action on upper side of diaphragm balances or overcomes pressure in chamber, thus tending to lower diaphragm. Main valve will follow due to gravity and line pressure closing it.

Description—Regulators are made in two types: single seated Type 39-Q1 for dead-end service and double seated Type 39-Q2 for continuous flow service. Valves are built of materials to meet various operating conditions.

FOSTER ENGINEERING CO., Dept. CEP, 124 Monroe St., Newark, N. J.

When inquiring specify CEP2296 . . . see information request blank, pgs. 16-17

AUTOMATIC and CONTINUOUS GAS ANALYSES FOR INDUSTRY



Cambridge Gas Analysers give industry continuous records, accurate and automatic. No intermittent sampling . . . no chemicals. These Analysers are used for determination of

- CARBON DIOXIDE in flue gases
- OXYGEN in flue and stack gases and in furnace atmospheres
- DISSOLVED OXYGEN in boiler feedwater
- HYDROGEN in steam
- CARBON MONOXIDE, NITROGEN, ARGON and many other gases can be determined by available Cambridge analysers designed to meet specific industrial conditions.

OTHER CAMBRIDGE INSTRUMENTS are available for use of Industry and Science.

Send for literature

CAMBRIDGE INSTRUMENT CO., Inc.

3732 Grand Central Terminal, New York, N. Y.

Pioneer Manufacturers of Precision Instruments

When inquiring specify CEP2297 . . . see information request blank, pgs. 16-17

READABLE

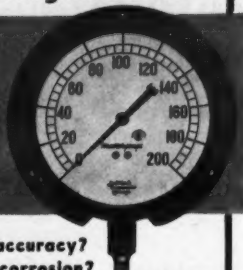
EVEN
'WAY UP HERE!

Even high overhead, the large gauge-type scale of the WESTON Thermometer is a cinch to read. Wherever mounted, it saves wasted time and needless steps because it can be read accurately from a distance. . . . Readability, however, is but one of its many advantages. It is of all-metal construction; with the stems made of stainless steel to resist corrosion. It readily absorbs temporary over-temperatures without damage, and without impairing its accuracy. No capillary correction ever is necessary, regardless of stem length. . . . WESTON Temperature Gauges are available in both angle and straight forms; in diameters, stem lengths and ranges essential for refinery service. Complete specifications in booklet form, gladly sent on request. Weston Electrical Instrument Corporation, 586 Frelinghuysen Ave., Newark, New Jersey.

WESTON GAUGE-TYPE THERMOMETERS

When inquiring specify CEP2298 . . . see information request blank, pgs. 16-17

YOUR NEEDS designed this

NEW
GAUGE

Do your gauges lose their accuracy?
Do you have trouble with corrosion?
Do you want a gauge that has light weight, but remarkably strong construction?

• If so, you will want the Marsh Mastergauge—a gauge with a movement that has super-stamina, remarkable accuracy, and the exclusive Marsh "Recalibrator" that keeps it accurate.

This finer gauge is now available in a practically indestructible Phenol-Condensate case—a case that is light, strong, non-corrosive, vapor proof, handsome. Write for facts.

The time-tested Marsh line includes gauges of many types and ranges, float and thermostatic traps, radiator valves and traps, radiator air valves and vents, dial thermometers, temperature and pressure recorders. Ask for handy pocket size catalog.

JAS. P. MARSH CORPORATION
2095 Southport Ave., Chicago, Ill.

MARSH TRAPS
GAUGES
VALVES

When inquiring specify CEP2299... see information request blank, pgs. 16-17

YOU BUILD THESE CONTROL VALVES!

Of course we design and manufacture them—but it is *your* requirements that govern these operations. We've kept abreast of developments in chemical process—the reason that whatever valve you may require you can get from Mason-Neilan.

Stainless steel valves, for instance. We build them of any stainless steel alloy you may require. Or acid resisting bronze or gunmetal or any suitable material—Mason-Neilan knows how to build them.

Designs range from needle-types for "eye dropper" flow to angle types for maximum flow and high pressure drop, butterfly or diaphragm closure types. Double-sealed packing glands are available for toxic gas service. Thus Mason-Neilan is ready to supply control valves built up to *your* job. Write for data.



MASON-NEILAN REGULATOR CO.
1203 ADAMS STREET, BOSTON, MASS., U. S. A.
New York Buffalo Philadelphia Pittsburgh Tulsa Toledo
Chicago St. Louis Houston Los Angeles San Francisco
Mason Regulator Co., of Canada, Ltd., Montreal, Canada

When inquiring specify CEP2300... see information request blank, pgs. 16-17

Control Instruments (Con.)

Automatic Alternator

Does Not Affect Level or Differential Settings of Pumps

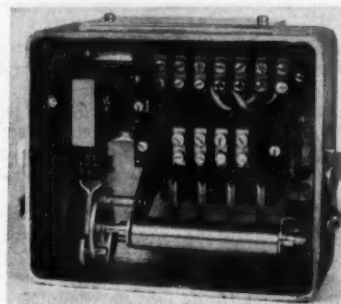
Uses—Made in two types: Type H circuit alternator is for float switches, pressure switches or mechanical motion; Type HSB circuit alternator is a complete two-pump alternating control unit for pumping into or out of sumps or tanks. Type H shown in cut.

Features—Units are solenoid operated; have hardened moving parts and enclosed 10-ampere Micro switches. Operated by closing simple two-wire electric circuit. Level or differential settings of either pump are not affected by alternator. No internal wiring to do. Easy to set for levels.

Description—Both types alternate or transpose two two-wire electric circuits after each cycle of operation. Type H is a separately mounted instrument designed to be wired to the controller and pump motors or circuits to be controlled; one of control units (pressure or float switch) must have an extra reversed circuit to close Type H alternate or solenoid circuit when the other circuit opens to stop the pump. Type HSB assembly has solenoid operating switch built into it. Only installation wiring needed for this type is connecting the two two-wire starter circuits and two 220 volt line wires to coded wires in control base. Type HSB will alternate the pumps and bring in the second pump when needed. Units have cast aluminum cases.

AUTOMATIC CONTROL CO., Dept. CEP, 1005 University Ave., St. Paul, Minn.

When inquiring specify CEP2301... see information request blank, pgs. 16-17



Low-Cost Photo-Electric Relay



Uses—Applications include counting, sorting, weighing, measuring, controlling, signalling, inspecting and regulating when conditions permit.

Features—Unit is low cost; compact molded cover houses cast alloy chassis.

Description—Relay operates at speeds up to 150 interruptions per minute and at a minimum of 40 foot-candles at the phototube with not more than 15 foot-candles of extraneous light present. Unit has controlled contact rating of 10 amperes at 115 volts a-c, with two normally open and two normally closed contacts. Relay coil is energized when light at phototube is reduced below 30 foot-candles. Relay may be mounted by any one of following methods: wall mounting on concealed rigid conduit, exposed rigid conduit, or with flexible conduit or open wiring; bench or table mounting on rigid conduit, or with flexible conduit or open wiring; and by other methods meeting accepted rules of practice. Device has removable bracket. Removable cover, easily removed without tools, is held firmly by spring clips.

GENERAL ELECTRIC CO., Dept. CEP, Schenectady, N. Y.

When inquiring specify CEP2302... see information request blank, pgs. 16-17

Better Than A Stop Watch

STANDARD ELECTRIC STOP CLOCK



Dial diameter is 3 1/8" for easy reading.

Accuracy per interval timed is to within .02 seconds on slow-speed models and to within .005 seconds on fast models. For superlatively accurate work the timing circuit can be wired to and controlled by automatic contacts on your test apparatus.

Comes mounted in a bakelite case or on a steel panel for building into your test apparatus.

Resetting to zero is instantaneous.

Guaranteed for one year, renders long service. Six standard models with different speeds and dial scales, also three 10" dial wall models.

Prices \$35.00 to \$70.00. Ask for Bulletin 108.

Write Dept. N.

THE STANDARD ELECTRIC TIME COMPANY

Springfield, Mass. ... Branch Offices in Principal Cities

"STANDARD MAKES EVERY SPLIT-SECOND COUNT"

When inquiring specify CEP2303... see information request blank, pgs. 16-17

BE READY

FOR THE DEMANDS
OF TOMORROW
with products
proved by
dependable test

IN THE
NATIONAL
Accelerated
WEATHERING
UNIT

• The "National" Accelerated Weathering Unit enables new formulas, new processes or new materials to be evaluated promptly and accurately. It eliminates the variations and uncertainties of outdoor exposure and provides a TRUE STANDARD OF COMPARISON for determining the weather resistance of newly developed products.

LET US DEMONSTRATE THE SPEED, ACCURACY AND ECONOMY OF THIS TEST UNIT

NATIONAL CARBON COMPANY, INC.

Unit of Union Carbide and Carbon Corp.

Carbon Sales Division: Cleveland, Ohio
GENERAL OFFICES
30 East 42nd Street, New York 17, N.Y.
Branch Offices: Pittsburgh, Chicago, San Francisco

When inquiring specify CEP2304... see information request blank, pgs. 16-17

No Waiting
for
**DISTILLED
WATER**

with a **BARNSTEAD AUTOMATIC STILL**

No matter how much or how little pure distilled water you want, it is always ready on tap with a Barnstead Automatic System. For such a system is completely self-starting, self-stopping and self-flushing. Without even thinking about it you always have a tank full of distilled water—consistently pure, constantly fresh—

ready for instant use. Barnstead gives you every convenience you need for pure water distillation—automatic operation by steam, gas or electricity, easily cleaned heating elements, all types of mountings, and stills ranging from $\frac{1}{2}$ to 500 gallons per hour capacity. Send for complete catalog.

Barnstead
STILL & STERILIZER CO. Inc.

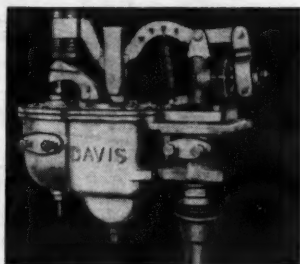
40 LANESVILLE TERRACE

FOREST HILLS, BOSTON, MASS.

When inquiring specify CEP2305 ... see information request blank, pgs. 16-17

Positive, Automatic TWO-STEP FLUID FLOW CONTROL

with the
DAVIS
No. 97TH
SOLENOID
VALVE



WHEREVER processing requires proportioning or throttling of liquid flow, there is a potential time and money saving use for the Davis No. 97TH Two-Step Solenoid Valve. One solenoid opens the single-seated, pilot-stem valve wide for full, practically unrestricted flow. The second solenoid throttles the flow to any predetermined degree desired. Valve closes tight without sticking. Dia-Ball Patented Packless Head eliminates packing maintenance and handles highly volatile liquids without leakage. All parts readily removable for cleaning. Sizes from $\frac{1}{4}$ " to 2". Body and trim in bronze, stainless steel, monel or nickel. Write for Bulletin S-1, containing complete data on No. 97TH and other Davis Solenoid Valves for all types of electrical control service. DAVIS REGULATOR CO., 2562 S. Washtenaw Ave., Chicago, Illinois.



DAVIS
REGULATOR CO.

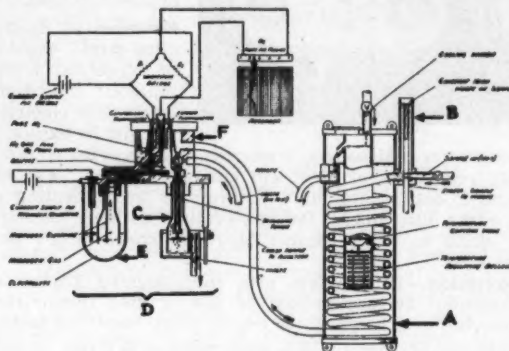
When inquiring specify CEP2306 ... see information request blank, pgs. 16-17

Corrosion Control For Boiler Systems

Dissolved Oxygen Recorder Sensitive to 1 Part
in 400,000,000

Uses—Completely automatic instrument provides a continuous indication and record of dissolved oxygen entering the boiler. Particularly valuable applications in high pressure steam boilers where control of dissolved oxygen is important to corrosion control.

Features—Extremely sensitive instrument (1 part in 400,000,000) eliminates former method of checking by chemical means requiring considerable time and producing only "spot" determinations. Continuous indicating and recording eliminate possibility of errors of chemical method which depend largely on operator's skill.



Operation—Metering instrument is based on thermal conductivity principal wherein 4 platinum spirals forming 4 arms of a Wheatstone bridge are used. As shown in diagram, water to be analyzed enters cooler-regulator "A" where it is reduced in temperature and maintained at approximately 85 deg. F. The constant head device "B" maintains correct water flow through scrubbing tower "C" of analyzer unit "D." Hydrogen is generated in electrolytic cell "E" and flows to scrubbing tower where it comes into intimate contact with sample water. Water dissolves some hydrogen and gives up part of its oxygen. Resultant mixture of gases diffuses to meter block "F" which contains the sensitive elements.

Description—Meter Block "F" consist of 4 platinum spirals which are heated to a definite value by current flowing through them. 2 spirals are exposed to sample gas and 2 are permanently sealed with saturated hydrogen. When pure saturated hydrogen surrounds exposed spirals, bridge is in balance and no deflection of recorder occurs, thereby indicating zero oxygen. When exposed spirals are surrounded by mixture of hydrogen and oxygen, their temperature increases due to lower thermal conductivity of mixture. This causes change in resistance of spirals with consequent unbalance of bridge circuit. Deflection of recorder is proportional to concentration of dissolved oxygen in sample water passing through scrubbing tower. Instrument has range of 0 to 1 part dissolved oxygen per 1,000,000 parts of water. Records full scale on 10" wide chart. Readings of .01 part of dissolved oxygen per 1,000,000 parts water are readily determined since they will scale .1 inch on chart.

CAMBRIDGE INSTRUMENT CO., Dept. CEP, Grand Central Terminal Bldg., New York, N. Y.

When inquiring specify CEP2307 ... see information request blank, pgs. 16-17

Low Pressure Gas Service Regulators

8-page booklet contains complete information on these regulators, including the new type 733A with built-in relief valve. Dimensions, specifications, capacities and prices are shown for various types. One section of booklet shows capacity and regulation charts. Bulletin No. 703 is available on request.

FISHER GOVERNOR CO., Dept. CEP, Marshalltown, Iowa.

When inquiring specify CEP2308 ... see information request blank, pgs. 16-17

Sack and Weigh the Dustite Way...



EXACT WEIGHT
Sacking Scales handle any bagging operation without lost motion... time consuming hand trimming... fill and check - weigh in one operation... increase sack yield from bulk... do the work with any class of labor. Write for the new 1941 Sacking Scale Catalog today.

- (1) Cut dust to a minimum.
- (2) Clip closer bag while filling.
- (3) Fill all types of EXACT WEIGHT Sacking Scales.

THE EXACT WEIGHT SCALE CO.
31 W. Fifth Ave. Columbus, Ohio

When inquiring specify CEP2309 ... see information request blank, pgs. 16-17

FOR THE LIQUIDS YOU HANDLE - IT PAYS TO KNOW



For accurate measurement BOWSER is "Bowl's" most widely used name.

METERING

- ★ Many types of meters for precise, accurate liquid measurement in various sizes and types.

FILTERING

- ★ Precision, self-cleaning and portable types for all liquids and gases.

PROPORTIONING

- ★ Proportioning systems for compound, bag and blending liquids. Accurate and reliable.

DISPENSING

- ★ Hand type self-acting pump, electric motor pump, and various types of many types.

LUBRICATING

- ★ Complete oil lubrication systems, filling apparatus, cutting oil systems, etc.

FILLING

- ★ Manual or automatic oil filling units, barrel filling... all with built-in metering.



LIQUID CONTROL SPECIALISTS SINCE 1885

The name that, for fifty-six years has meant efficiency, in handling industrial liquids. A wide range of standard or special equipment is at your disposal. Check the list at the left—then write for details.

S. F. BOWSER & CO., Inc.
1265 Creighton Ave. E.
FORT WAYNE, INDIANA

Combination storage and dispensing units for oils, paint oils and other liquids mean cleanliness and safety.



When inquiring specify CEP2310 ... see information request blank, pgs. 16-17

MERCURY-ACTUATED INSTRUMENTS



Dial Thermometer

A mercury-actuated Dial Thermometer has now been designed that is the last word in accuracy and quick-reading. It is designed to give many years of satisfactory service. Stainless-steel flexible tubing connection and bulb are standard, at no extra cost. All standard ranges: —40 to 1000°F. (550°C.). Write for Bulletin #1500.

Recording Thermometer

After proving its superiority in many tests, this mercury-actuated Recording Thermometer is guaranteed to be extremely accurate and sensitive and to give many years of service. Stainless-steel flexible tubing connection and bulb are standard, without extra cost. All ranges: —40 to 1000°F. (550°C.). Has many exclusive features. Write for Bulletin #1300.



THE PALMER CO. Mfrs.

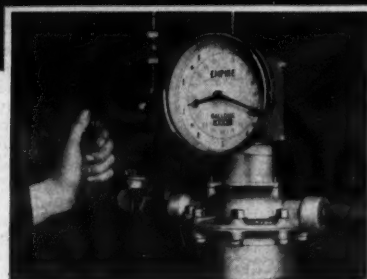
Thermometers: Recording, Industrial, Laboratory and Dial.
2519 Norwood Ave., Cincinnati, Norwood, O.

Can. Plant: King & George Sts., Toronto

When inquiring specify CEP2311... see information request blank, pgs. 16-17

METERS

for accurate production control



To eliminate waste—to discover hidden losses—to prevent long or short deliveries... these and other improvements in cost and production control are readily obtainable with Empire Meters. Our new Bulletin 621 will help you choose the right meter for your special needs. Yours on request.

NATIONAL METER COMPANY
4295 First Avenue, Brooklyn, N. Y.

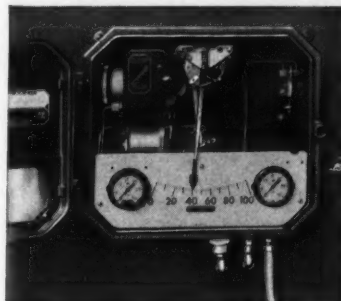
Empire METERS

When inquiring specify CEP2312... see information request blank, pgs. 16-17

Control Instruments (Con.)

Remote Pneumatic Transmission System

Eliminates Electrical Transmission Hazards In Explosive Atmospheres



Uses—System is for the correlation of temperature, pressure, flow or liquid level data on a centralized panel or in a control room, remote from the point of measurement.

Features—System eliminates hazards of electrical transmission by doing away with electrical circuits in explosive

atmospheres. Measures, transmits, and receives continuously regardless of electrical current failures. For the operator out on the unit, it provides an indicating or recording instrument for observation without necessity for going to main control board to check unit's performance.

Description—This system uses the standard Taylor instruments. It may consist of one or two transmitters connected to a receiver; or one or more receiving instruments, not necessarily near each other, and as far as 1,000 feet from the transmitter. Transmitters or receivers may be indicating, recording or controlling types. Air pressure is transmitting medium, with 1/4" O.D. copper tubing as means of connection. Speed of response of receiver to changes in output air pressure from transmitter is largely dependent upon distance—the maximum lag being one second per hundred feet of connecting tubing. Bulletin No. 98156 describes the system in detail.

TAYLOR INSTRUMENT COMPANIES, Dept. CEP, Rochester, N. Y.

When inquiring specify CEP2313... see information request blank, pgs. 16-17

Program Clocks

Synchronous; For Operating Time Signals

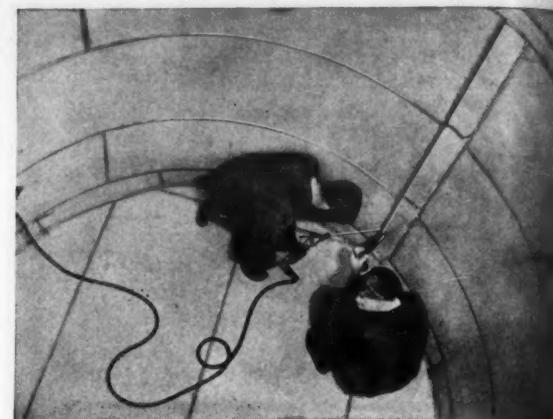
Uses—Clocks can be built to operate for many different purposes such as daily siren testing, timing industrial processes, signalling start and end of operating periods, etc.

Features—Clocks have large, legible 24-hour dial and a one-hour dial cam. Pointers, connected to a contact arm, ride the dials and permit contact arm to fall only when preset time is reached. Units are compact and enclosed in dust-proof case.

Description—Made in two types: Type P 512 will operate a signal at any five minute period; Type PD 124 will operate a signal at any one minute period. Clocks are operated by heavy duty synchronous motors, and contact arrangements are such that accuracy is assured. Contact can be so arranged as to operate a signal either in one ring or a coded ring, or a definite duration of time, from 2 to 6 seconds.

ZENITH ELECTRIC CO., Dept. CEP, 845 S. Wabash Ave., Chicago, Ill.

When inquiring specify CEP2314... see information request blank, pgs. 16-17



Turn Old Corroded Tanks into STAINLESS Equipment at Surprisingly Low Cost

Have large tanks relined with Ingaclad Stainless-Clad Steel Sheets right in your plant without serious work interruption. Already used in many of America's largest chemical and food process plants.

Write for free Blue Prints of regular procedure and complete information about

INGACLAD
STAINLESS-CLAD STEEL

(Trade Mark Reg.)

Ingersoll Steel & Disc Division

BORG-WARNER CORPORATION

310 South Michigan Avenue Chicago, Illinois
Plants: Chicago, Ill.; New Castle, Ind.; Kalamazoo, Mich.

When inquiring specify CEP2315... see information request blank, pgs. 16-17

Now...in One Step

Blending
Pulverizing
No Separating
No Bolting

Speedy and thoro pulverizing in a single step—that's the One Step Mikro-Pulverizer. One pass thru the mill generally results in a finished product—pulverized and blended; no bolting or separating necessary.

Dustless operation without fans or cyclones. Astonishing savings in time and labor. Large and small units. Performance guaranteed.

Write for new 32 page catalog.

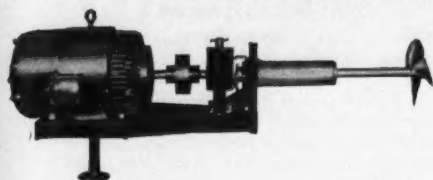
PULVERIZING MACHINERY COMPANY

114 Valley Road
Roselle Park, N. J.



When inquiring specify CEP2316... see information request blank, pgs. 16-17

For every mixing operation
regardless of size and nature
PUT IT UP TO EASTERN



Eastern mixers are known at home and abroad for their rugged dependability and economy of operation. Available in all styles and sizes—portable, vertical and side entering for complete agitation of all types of liquid. For example, Model SES 11, illustrated, will thoroughly blend in excess of 400,000 gallons of light liquids.

Send for our new Catalog-Manual containing the following engineering data:

- Engineering considerations in mixer selection
- Power requirements
- High speed vs Low speed
- Single vs Dual mixers
- Side entering vs Fixed vertical

EASTERN ENGINEERING CO.
49 Fox Street, New Haven, Conn.

When inquiring specify CEP2317 ... see information request blank, pgs. 16-17

CORROSION

won't affect these nozzles

SPRAY ATOMIZING ... here's a nozzle that gives you perfect atomization, a fine misty spray without using compressed air. Hollow cone spray pattern gives uniform distribution. Made from brass, Monel, stainless steel and other non-corrosive materials.

FULLJET ... this nozzle is designed for gas washing, evaporative condensers, rinsing and chemical processes. Full cone spray pattern gives a penetrating rain-like spray, available in all non-corrosive materials.

WHIRLJET ... an efficient, non-clogging, centrifugal-type nozzle that contains no obstructions of any kind. Made of all non-corrosive materials. Designed for air conditioning, brine spraying, and many chemical processes.

WRITE FOR THIS CATALOG

It illustrates many more nozzles, also capacity, performance and dimension tables and application data. If you have a spraying problem, let us help you with it, our engineers are prepared to cope with the tough ones. Write to —

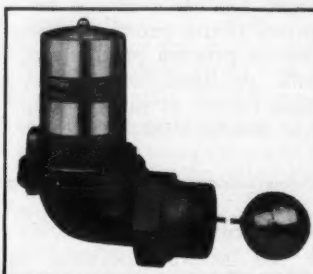
SPRAYING SYSTEMS CO.
4037 West Lake Street, Chicago

SPRAYING SYSTEMS CO.

When inquiring specify CEP2318 ... see information request blank, pgs. 16-17

Liquid Level Controls

No Stuffing Boxes, Bellows, Rotary Shafts or Packing



Uses — Controls are for tank or vat applications where it is necessary to maintain a liquid level within a certain differential. As electrical units, controls may be used to energize a pump, solenoid valve or motorized valve depending on application. Also, may be used in an alarm system to

flash a light or ring a bell when liquid level reaches a certain point.

Features — Switching action is produced by magnetic attraction and is simple and positive in operation—no stuffing boxes, bellows, rotary shafts or packing assemblies which are subject to sticking, binding, breaking or rupturing.

Description — These tank float switches are made in two models: Model TF-5 for flange mounting and Model TF-6 (shown in cut) for screw-in mounting. Model TF-6 incorporates a 2-1/2" male thread for the screw-in mounting. It permits an operating differential ranging from a minimum 1" with a 6" float rod to a maximum 13" with a 26" float rod. Standard TF-6 model comes complete with a 2-1/2" seamless copper float ball, monel float rod, S.P.S.T. mercury-to-mercury switch (rated 10 Amperes at 250 volts), chrome nickel iron body and head, and spun aluminum cover.

FRED H. SCHAUB ENGINEERING CO., Dept. CEP, 325 West Huron St., Chicago, Ill.

When inquiring specify CEP2319 ... see information request blank, pgs. 16-17

Radiamatic Pyrometer

Accuracy Unaffected By Dust, Fumes & Corrosive Atmospheres

Uses — For operations under severe conditions of temperature, vibration, etc., including applications where vibration breaks the ordinary thermocouple; where furnaces move or rotate; where work moves or thermocouples cannot be installed; where

temperature is above thermocouple range; where furnace atmosphere conditions are unfavorable; or where maintenance of platinum thermocouples is costly.

Features — Rugged construction; accuracy is unaffected by dust, dirt, fumes and corrosive atmospheres. Easily installed complete with all accessories for mounting. Instrument is self-contained and compensated for ambient temperature errors.

Description — The pyrometer consists of a heat-resisting lens, a compensator and a thermopile. Heat radiated from the hot object falls on the lens and is focused on the thermopile which generates an e.m.f. proportional to the true temperature. Compensator corrects for ambient temperature fluctuations surrounding the detector, hence he desired e.m.f. alone developed by the thermopile is translated into degrees of temperature and is continuously indicated, recorded or controlled by the potentiometer. Bulletin No. 95-1 contains full description.

BROWN INSTRUMENT CO., Dept. CEP, Wayne & Roberts Ave., Philadelphia, Pa.

When inquiring specify CEP2320 ... see information request blank, pgs. 16-17



... SELECT YOUR BEARING PROMPTLY FROM THE DODGE CHART!

There's no need to hold up production for bearings—the Dodge Bearing Selection Chart tells you the Right Bearing for the job—simply determine the shaft diameter — shaft speed — load and service condition — then check them on the Dodge Chart—and you'll find the bearing you need. You can order from the Dodge distributor who carries most sizes in stock and get immediate delivery.

DODGE MANUFACTURING CORPORATION
MISHAWAKA, INDIANA, U. S. A.

DODGE
MISHAWAKA

This new bulletin A-325 takes the guesswork out of bearing selection. Send for copy.



When inquiring specify CEP2321 ... see information request blank, pgs. 16-17

38% OF ALL POMONA PUMPS ARE BOUGHT BY PRESENT USERS

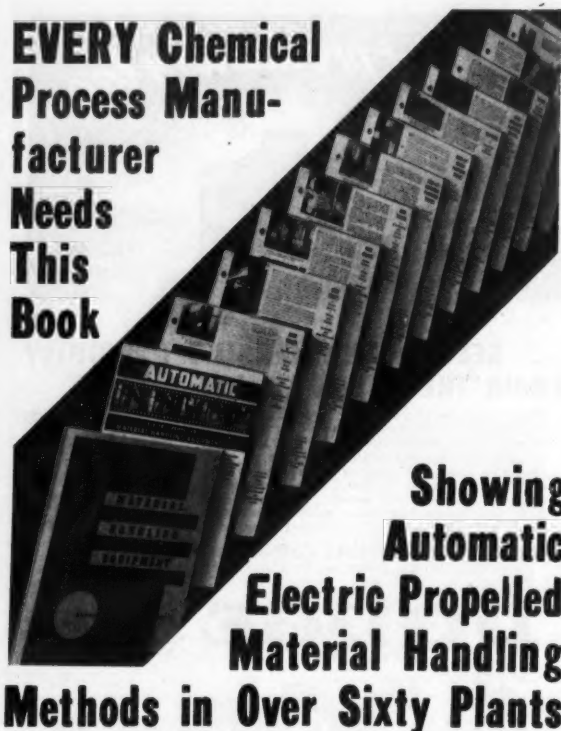
Every third Pomona-made pump joins another Pomona installation in some important industrial, transportation, agricultural, mining or municipal water-lifting job. This conclusive expression of owner satisfaction has made Pomona the dominant leader in the deep-well turbine field. Such superiority merits investigation. Pomona Pump Co., 120 Broadway, New York City. Plants at 4301 So. Spring Ave., St. Louis, Mo. 204 E. Commercial St., Pomona, Calif.

Established 1902

POMONA Water Lubricated **PUMPS**

When inquiring specify CEP2322 ... see information request blank, pgs. 16-17

EVERY Chemical Process Manufacturer Needs This Book



Showing Automatic Electric Propelled Material Handling Methods in Over Sixty Plants

Every production manager needs this book. A complete library of information — it shows how materials are electrically transported and stacked in over sixty plants — how storage space is conserved — how to stack raw and finished products roof high — how to reduce labor costs to speed up production. In addition, it shows how you can obtain experienced engineering service and advice on your problems without any cost or obligation whatsoever.



Send for your copy now!

Don't wait or delay getting your copy of the "Automatic" book. Its upward of 150 illustrations will suggest many ways of solving those material handling problems at a saving — of meeting rising costs and breaking down production bottlenecks. Yours will be sent by return mail if you fill out and mail the coupon now.

**AUTOMATIC
TRANSPORTATION CO.
CHICAGO, ILL.**

AUTOMATIC TRANSPORTATION COMPANY

Div. of the Yale & Towne Mfg. Co.

119 WEST 87TH ST. CHICAGO, ILL.

Gentlemen: Please send the book on "Automatic" Material Handling Equipment.

Name _____ Position _____

Address _____

Company _____

City _____ State _____

CEP2323

When inquiring specify CEP2323 ... see information request blank, pgs. 16-17

NEW LITERATURE

The following literature has been issued recently by manufacturers of the products discussed and is available to process production executives on request. Address requests to the publishers by using handy request form, pages 16-17, or write to the manufacturers direct.

Mineral Wool Blanket Insulation

Six-page folder describes this insulation material for large or small, flat or curved surfaces at temperatures to 1200 deg. F. Interesting chart is included showing the comparative heat conductivities of various other types of insulation material. Another chart supplies easy-to-get information for proper selection of this mineral wool blanket insulation. Other details of application, physical characteristics and list prices are included. Folder No. I-64 is available on request.

REFRACTORY & INSULATION CORP., Dept. CEP, 383 Fourth Ave., New York, N. Y.

When inquiring specify CEP2324 ... see information request blank, pgs. 16-17

"Tantalum Heaters for Acid Solutions"

Large photographic illustrations, concise descriptive information and tables of data are the features of this new 20-page booklet. It describes and illustrates nine different types of tantalum heaters, heat exchangers and cooling units. Table shows resistance of tantalum to some of the more common reagents, data on heating capacity of tantalum heat transfer equipment and suggestions for the installation and care of tantalum equipment. Available on request.

FANSTEEL METALLURGICAL CORP., Dept. CEP, North Chicago, Ill.

When inquiring specify CEP2325 ... see information request blank, pgs. 16-17

Handbook On Seamless Steel Pipe Fittings

216-page catalog, casebound in dark green cloth and gold imprinted, includes within its pages much technical data not elsewhere available on seamless steel pipe fittings for welding and forged steel flanges. Complete data are presented on design, pressure and temperature ratings, and on flange bolting, new test analyses, accepted standards, etc. Prices and dimensions in a complete range of sizes for all services are shown for every fitting in this company's extensive line. Catalog No. 401 is available on request.

TAYLOR FORGE & PIPE WORKS, Dept. CEP, P. O. Box 485, Chicago, Ill.

When inquiring specify CEP2326 ... see information request blank, pgs. 16-17

Bronze Oilless Bearings

The bronze cover of this 16-page booklet suggests the features described ... various types of bearings are illustrated and described ... suggestions are given for applying "Metalline" to user's bearings ... tables give standard dimensions and performance facts of the manufacturer's "Metalline" bearings. Available on request.

R. W. RHODES METALLINE CO., INC., Dept. CEP, 50-17 Fifth St., Long Island City, N. Y.

When inquiring specify CEP2327 ... see information request blank, pgs. 16-17

"Rubber Products for Industry"

Three sections of this new booklet feature rubber products specifically suited for different types of industrial applications. Air drill hose, welding hose, steam hose, water hose, sand suction hose, fire mill and chemical hose, sanitary hose, brewery and winery hose, acid hose, sand blast hose, cement gun hose and hose couplings are illustrated and described. Booklet is attractively printed in color ... 36 pages. Available on request.

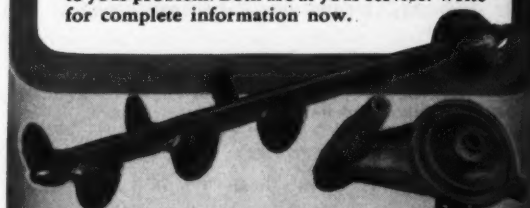
HEWITT RUBBER CORP., Dept. CEP, BUFFALO, N. Y.

When inquiring specify CEP2328 ... see information request blank, pgs. 16-17

MORE PROOF THAT ANODE CAN SOLVE RUBBER-COVERING PROBLEMS

• An agitator blade and a moisture trap—two widely different products, but both presented a mighty tough problem when it came to applying a perfect and permanent rubber covering. But Anode did the trick. This process can cover any irregular shaped metal part with a smooth, uniform thickness of soft, semi-hard or hard rubber covering that has unusual adhesion, greater tensile strength and superior age resistance.

Miller's years of rubber-covering experience, plus the Anode process, may hold the answer to your problem. Both are at your service. Write for complete information now.



MILLER RUBBER COMPANY, INC. • AKRON, OHIO

"Engineers in Rubber"

When inquiring specify CEP2329 ... see information request blank, pgs. 16-17



Therm-O-flake INSULATION BRICK

One of lightest insulation brick available—(about one pound each).

Has low thermal conductivity, and is most economical for efficient insulation.

Can be compacted without breaking and cuts easily. Especially valuable for back up work behind fire brick walls.

Acts as expansion cushion between furnace walls and binding structure.

Write for Information and Prices

Other Therm-O-flake Products

Made from Exfoliated Vermiculite

Granules - Brick - Block - Concrete



JULIET, ILL.

When inquiring specify CEP2330 ... see information request blank, pgs. 16-17

BLAW-KNOX UNLOADING AND STORAGE SYSTEMS FOR LIQUEFIED GASES

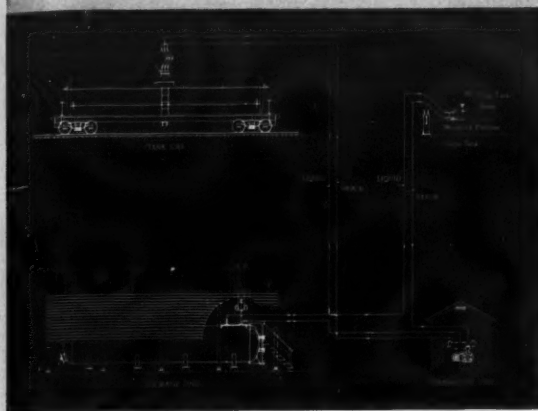


Diagram of unloading and storage plant for ammonia.

Remarkable savings can be made by purchasing liquefied gas in carload lots instead of in smaller quantities. Handling and storage is scientifically provided for by a Blaw-Knox Unloading and Handling System, thoroughly engineered and designed for the job. Such installations pay for themselves in a very reasonable time.

A Blaw-Knox engineer will gladly study your conditions without obligation.

BLAW-KNOX DIVISION
OF BLAW-KNOX COMPANY
Farmers Bank Building Pittsburgh, Pa.

When inquiring specify CEP2331 ... see information request blank, pgs. 16-17



Accepted THE WORLD OVER

—as The Standard Three Ton Low Lift Truck for various industries in 31 states and 11 countries overseas. Elwell-Parker Type EP-6, 3-tonner is:—

Simple in construction—only 3 moving parts in lift mechanism. Fastest operating—lifts 6,000 pounds $5\frac{1}{4}$ inches in 4 seconds. **Rugged**—all welded frame—vital parts are of drop forged alloy steel. Largest drive wheel tires and bearings found on any 3-ton low lift truck.

Safe—each truck built with Underwriters' Laboratories' inspection service. **Lasting**—first EP-6 built in 1926. Progressively refined. No record of a single EP-6 being scrapped.

Colors: safety green or orange finish. Will send our nearest field engineer to properly apply this dependable machine to speed up production in your Process Industrial Plant. The Elwell-Parker Electric Co., 4239 St. Clair Ave., Cleveland, Ohio.

ELWELL-PARKER Power Industrial TRUCKS

When inquiring specify CEP2332 ... see information request blank, pgs. 16-17

New Literature (Con.)

Manual of Welding and Fabricating Procedures for Stainless Clad Steel

16-page, two-color booklet describes the latest methods of fabricating and welding stainless clad steel. Improvements in technique to assure maximum strength, corrosion resistance and ductility in welded fabrication have been stressed in this booklet. Many phases of forming, bending, welding, heat-treating, cleaning, grinding and polishing stainless clad steel are covered. Many photos and diagrams supplement the descriptive material and add to booklet's effectiveness. Booklet is available.

INGERSOLL STEEL & DISC DIV., Borg-Warner Corp., Dept. CEP, 310 S. Michigan Ave., Chicago, Ill.

When inquiring specify CEP2333 ... see information request blank, pgs. 16-17

Single Stage Turbo Blowers

Profusely illustrated, and with generous use of color, this 24-page booklet presents in attractive form the single-stage Turbo-Blowers for use wherever large volumes of air or gas are needed at pressures from 1 to 6.25 pounds. It gives the advantages of turbo-blowers, their method of operation and characteristics. It illustrates and describes various single-stage motor and mechanically driven blowers including geared-head, over-hung and pedestal types, as well as double inlet blowers for large volumes. Blower accessories such as blast gates, constant air weight control for cupolas, speed governors, etc. are also described. Available on request.

ALLIS-CHALMERS MFG. CO., Dept. CEP, Milwaukee, Wisconsin.

When inquiring specify CEP2334 ... see information request blank, pgs. 16-17

Rotary Drum Vacuum and Top Feed Filters

Two bulletins describe these two types of filters. Bulletin F-100, four-pages, two-colors, shows the detailed operating principle of the rotary-drum vacuum type with each major feature described in detail. Bulletin F-101 explains the major advantages of dewatering and drying in one unit of the top-feed filter. Typical installation is shown by means of a line drawing. Specifications for both types of filters are supplied in the individual bulletins. Both bulletins are available on request.

SWENSON EVAPORATOR CO., Dept. CEP, Harvey, Ill.

When inquiring specify CEP2335 ... see information request blank, pgs. 16-17

Reference Book on Synthetic Organic Chemicals

This comprehensive, 96-page reference book is the completely revised, tenth edition, including six new chapters and information on 66 new products. Each synthetic organic chemical is classified and described in accordance with group to which it belongs. Such chemicals include nearly every major family of organic chemicals—alcohols, glycols, ethers, oxides, alcohol-ethers, esters, ketones, aldehydes, acids, anhydrides, chlorinated compounds, amines, penetrants, synthetic resins, activated carbons, and hydrocarbon gases. Booklet is well indexed. About 45 tables give information such as resin solubilities and chemical arrangements in order of their physical properties such as boiling point, specific gravity, viscosity, etc. Book is available on request.

CARBIDE & CARBON CHEMICALS CORP., Dept. CEP, 30 East 42nd St., New York, N. Y.

When inquiring specify CEP2336 ... see information request blank, pgs. 16-17

Electrode Selector Chart

To simplify the selection of proper electrode, by arc welding operators, this chart has been prepared. Under separate guides, listed according to metal to be welded, chart enumerates such things as suggested type of electrode, welding procedure and recommended voltage and current values. Can be hung on machine or on wall. Available on request.

AIR REDUCTION, Dept. CEP, 60 E. 42nd St., New York, N. Y.

When inquiring specify CEP2337 ... see information request blank, pgs. 16-17



TRADE
MARK

AN UNUSUAL DRIVE

One of twelve unusual wire mill drives made possible with DIAMOND Roller Chains. The driven shafts are rotated in the same direction as the driver—an easy job because roller chains are the same on either side and may run under or over sprockets.

Let us make a survey of your machinery and equipment drives. — Savings, greater production, fewer delays may be the result. DIAMOND CHAIN & MFG. CO., 411 Kentucky Ave., Indianapolis, Indiana.

DIAMOND ROLLER CHAINS

When inquiring specify CEP2338 ... see information request blank, pgs. 16-17



Link-Belt Car Spotter eliminates switch engine costs and time wasting delays. Free folder explains big savings!

Here's the way to speed up your car loading or unloading operations. The Link-Belt Car Spotter is a motor-driven capstan which is offered in various sizes capable of moving one to six loaded cars.

FREE!

SEND FOR YOUR COPY NOW!

This low-cost, instant-service car spotter has proved itself at scores of plants. Ask for free folder which tells all about it. Write today! Ask for No. CEP-1592

8919

LINK-BELT COMPANY
307 N. MICHIGAN AVE. CHICAGO, ILLINOIS

When inquiring specify CEP2339 ... see information request blank, pgs. 16-17

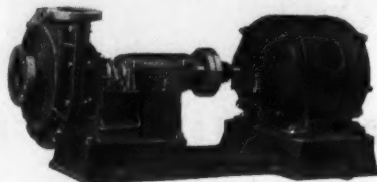
The OLIVITE!

The ACID-HANDLING PUMP
with exclusive features
resulting in low-cost pumping

3 SIZES

1 1/4", 2" or 4",
Direct, Flat or V.
Belt Drive.

Illustration
shows 2" pump.
coupling con-
nected.



The Olivite Acid-Handling Pump cuts costs through its durability, strength and efficiency. It's durable because of the high resistance to corrosion of the protecting compound OLIVITE and because of the permanence of its bond to the metal parts. It's strong because of its sturdy, cast-iron construction. It's as efficient as any centrifugal pump. The Olivite Pump is recommended for the handling of commercial acids (concentrated nitric excepted) and for many salts. Liquids may be hot or cold. The floating stuffing box and spring-tensioned gland help keep the operations clean and safe.

In writing for bulletin 302, tell us about your problem.

OLIVER UNITED FILTERS INC.

Dept. OP 33 West 42nd St., New York, N. Y.

When inquiring specify CEP2340 . . . see information request blank, pgs. 16-17

HALF THE LABOR— TWICE THE SAFETY

handling
Acids and
Chemicals!



PULMOSAN CARBOY TRUCK and TILTER



If you handle carboys in your plant, these patented devices are a real investment in safety and savings. One man does the work of two, handling—moving—pouring, without danger. He slips Truck under carboy handles, rolls onto Tilter, locks thereon. Turns geared crank to gradually pour any amount, without spilling or splashing. Inverts to drain last drop. Both devices of welded steel. Get prices and details.

• Write for leaflet "Safe Handling of Acids & Chemicals."

**PULMOSAN
SAFETY EQUIP.
CORPORATION**
Dept. EP, 176 Johnson St.
Brooklyn, N. Y.

When inquiring specify CEP2341 . . . see information request blank, pgs. 16-17

New Literature (Con.)

Chemical Processing Equipment

16-page, two-color booklet shows many types of chemical processing equipment including mixers of several types, revolving drums, pot mills, roller mills, turbo mixer or process kettles, gyrating screens, etc. Many photos are used with descriptive copy for each machine, with one section devoted to mixing actions and agitator blades. Bulletin No. 353 is available on request.

J. H. DAY CO., Dept. CEP, Cincinnati, Ohio.

When inquiring specify CEP2342 . . . see information request blank, pgs. 16-17

Bakelite Molding Plastics

Dramatic color illustrations are used in this new 32-page booklet to show the wide variety of products made from bakelite molding plastics . . . in many attractive colors. The booklet is unusually well done, profusely illustrated and gives much valuable information. Contains descriptions of compression and injection molding processes and explains essential differences between thermosetting (hot-set) and thermoplastic (cold-set) molding materials. The physical, mechanical and electrical properties and characteristics of "Bakelite" phenolics, ureas, polystyrenes and acetates are enumerated in editorial and table form. Available on request.

BAKELITE CORP., Dept. CEP, 30 East 42nd St., New York, N. Y.

When inquiring specify CEP2343 . . . see information request blank, pgs. 16-17

Flexibility in Mixing Operations

This new 8-page leaflet, in color, describes and illustrates the vertical mixing machine using the planetary principle and designed to accommodate 85 gal. bowls. Manufacturer stresses features of variable speed, functional agitators, interchangeable bowls, planetary action, tremendous power and wide flexibility for variety batch mixing. Also describes two smaller models using 30 and 40 gallon bowls.

AMERICAN MACHINE & FOUNDRY CO., Dept. CEP, 511 Fifth Ave., New York, N. Y.

When inquiring specify CEP2344 . . . see information request blank, pgs. 16-17

Gear-In-Head Type, Screw Pumps

Profusely illustrated, this 8-page booklet supplies much information about these screw pumps. Selection chart can be effectively used for estimating purposes. Other charts and tables contain detailed specifications for various types and sizes of pumps. This two-color bulletin, S-203, is available on request.

QUIMBY PUMP CO., Dept. CEP, 340 Thomas St., Newark, N. J.

When inquiring specify CEP2345 . . . see information request blank, pgs. 16-17

Rubber Black Testing Procedures

Attractive, 16-page-and-cover booklet sets forth in condensed form the essentials of the group of tests used by this company to evaluate blacks for use in rubber. Covered in details are such tests as color, DPG absorption, volatile matter and moisture, heat generation, plasticity, rebound and indentation, stress-strain, angle abrasion, Williams abrasion, T-50 and oxygen bomb aging. Also given are standard recipe and mill room procedure for grading carbon black. Booklet is available on request.

GODFREY L. CABOT, INC., Dept. CEP, 77 Franklin St., Boston, Mass.

When inquiring specify CEP2346 . . . see information request blank, pgs. 16-17

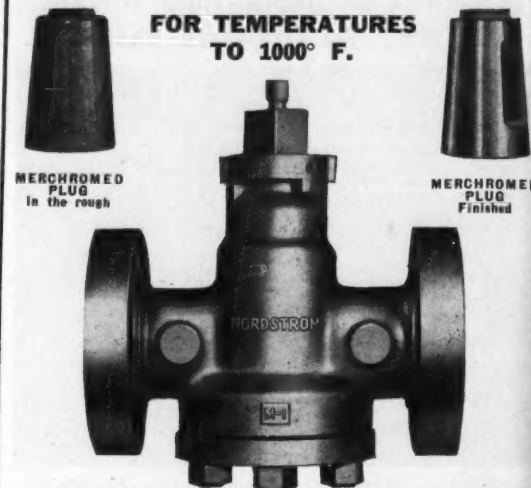
Modern Trends in Nickel Steel and Cast Iron Gear Materials

16-page booklet covers many phases of the trends in gear manufacturing. Included are such subjects as types of alloy steels used for gears, fabrication factors, machineability of alloys, etc. Many informative tables of engineering data are used to illustrate specific points, as are photos and diagrams. Booklet is available.

INTERNATIONAL NICKEL CO., Dept. CEP, 67 Wall St., New York, N. Y.

When inquiring specify CEP2347 . . . see information request blank, pgs. 16-17

FOR TEMPERATURES TO 1000° F.



NORDSTROM MERCHROMED LUBRICATED VALVE

with hot-lapped plug for extreme temperatures
Resists corrosion and erosion. Ask for Bulletin.

MERCO NORDSTROM VALVE CO.

A Subsidiary of Pittsburgh Equitable Meter Co.

400 LEXINGTON AVE., PITTSBURGH, PENNA.

When inquiring specify CEP2348 . . . see information request blank, pgs. 16-17

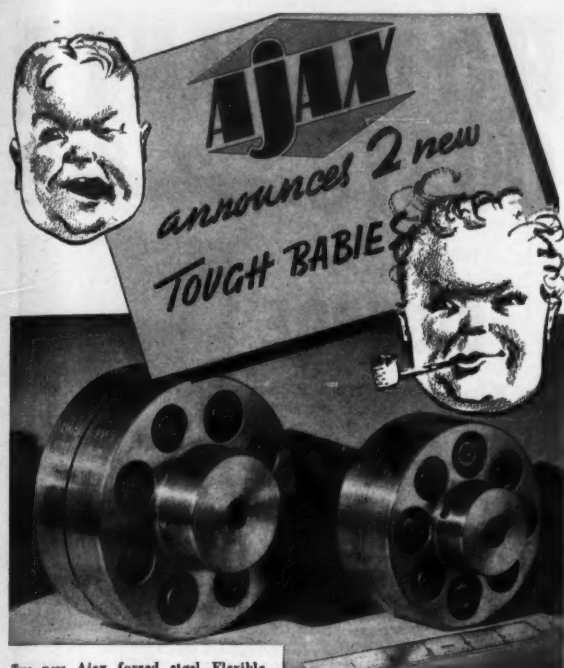
★ CUSTOM BUILT Heating or Cooling COILS



Coils made of Copper, Aluminum, Brass, Admiralty metal, etc., for air conditioning and industrial processing. Over 10,000 standard sizes from 1 1/2"x1 1/2" to 60"x120"; available 1, 2, 3, 4, 5, 6, etc., rows deep. Continuous fins across coil face—for easy cleaning. Continuous fins in coil depth—for non-clogging. Send for the McQuay Coil Catalog. McQuay, Inc., 1615 Broadway Street, Minneapolis, Minn.

McQuay INC.
HEATING, COOLING,
AIR CONDITIONING
AND REFRIGERATION
EQUIPMENT

When inquiring specify CEP2349 . . . see information request blank, pgs. 16-17



Two new Ajax forged steel Flexible Couplings with 1½" and 1¾" maximum bores meet the trend of using alloy steel shafts carrying a high percentage of their torque capacity. Rubber bushings and graphite-bronze

bearings give resilient flexibility, positive drive, free end float, and eliminate backlash, noise and lubrication problems.

AJAX FLEXIBLE COUPLING CO.

Incorporated 1920

201 ENGLISH ST.

WESTFIELD, N. Y.

When inquiring specify CEP2350... see information request blank, pgs. 16-17

New Literature (Con.)

"Standard Methods" for Chemical Treatment of Boiler Water

This treatise on the chemical treatment of boiler water, known as "Standard Methods—No. 122" devotes 9 multi-graph pages to the discussion of basic principles and recommended methods and to the equipment essential to such operations. Six additional pages show illustrations of equipment... various units clearly identified... and diagram of a typical installation. Available on request.

%PROPORTIONERS%, INC., Dept. CEP, 37 Coddling St., Providence, R. I.

When inquiring specify CEP2352... see information request blank, pgs. 16-17

Handy Ohm's Law Calculator

This new, unique calculator has been designed for handy use in quickly determining the answer to any Ohm's Law problem with one setting of the slide. Calculator has scales on both sides to cover range of currents, resistances, wattages, voltages... convenient stock unit selector listing hundreds of stock values... and other helpful features. Available to responsible men in chemical process plants who write in on company letterhead.

OHMITE MFG. CO., Dept. CEP, 4835 Flournoy St., Chicago, Ill.

When inquiring specify CEP2353... see information request blank, pgs. 16-17

Magnetic Equipment for Ceramic and Non-Metallic Industries

8-page, two-color booklet shows a number of applications of equipment such as the wet-type magnetic separator, high intensity type separators, magnetic pulleys and drums, etc. Applications, operations and features of various types are shown with supplementary drawings and photos. Vol. 2, No. 3 of "The Magnet" is available on request.

DINGS MAGNETIC SEPARATOR CO., Dept. CEP, 678 Smith St., Milwaukee, Wis.

When inquiring specify CEP2354... see information request blank, pgs. 16-17

"The Story of Modern Industrial Weighing"

Two-color broadside shows about 80 different types and styles of scales for industrial use. Each scale has descriptive material giving capacities and other data. Twenty or more photos show widely varied applications in all types of industries. Scores of the 50,000 users are listed. Broadside is available on request.

EXACT WEIGHT SCALE CO., Dept. CEP, 31 West Fifth Ave., Columbus, Ohio.

When inquiring specify CEP2355... see information request blank, pgs. 16-17

Fintubes for Heat Exchangers

This leaflet describes the features of fusion-welded fintubes and their advantages for use on heat exchangers. List of manufacturers who have designed heat exchanger equipment, based on these fintubes, is given. Available on request.

BROWN FINTUBE CO., Dept. CEP, Elyria, O.

When inquiring specify CEP2356... see information request blank, pgs. 16-17

Bearings and Power Transmission Equipment

Comprehensive, 88-page book treats effectively with bearings and other power transmission equipment. Much engineering information is supplied in the book, including complete tables of sizes, dimensions, weights and list price. There are tables of load ratings and minimum life expectancies. Number of pages are devoted to the proper method of selecting a unit for each class of service; several formulae and examples of selection are used. Book is thoroughly indexed and is well illustrated. Book No. 1775 is available on request.

LINK-BELT CO., Dept. CEP, 307 N. Michigan Ave., Chicago, Ill.

When inquiring specify CEP2357... see information request blank, pgs. 16-17

INDUSTRY CHOOSES YALE!

Exclusive features
MAKE YALE
CHAIN HOISTS

the buy!

Three types: spur-gear hoists, screw-gear hoists, and differential hoists, all with safety hook, detachable shackles and specially processed, rust-resistant, friction-minimizing, steel chain.

Yale Hoists are the best buy of the materials handling field. In no time at all they more than pay for themselves by the economies their efficiency effects.

Not only more efficient—they're safer, too. In the market for a hoist? Remember Yale builds them better!

There's a Yale Chain Hoist for every purpose. Capacities 300 lbs. to 40 tons. Send for FREE Catalog.

YALE

THE YALE & TOWNE MFG. CO.
4530 Tacony Street, Philadelphia, Pa.

Please send me without obligation your new FREE catalog showing the entire Yale Hoist line.

Name _____

Address _____

When inquiring specify CEP2358... see information request blank, pgs. 16-17

Now you can have
HIGH EFFICIENCY
Cyclone DUST
COLLECTOR

AT NO EXTRA COST

NOW for the first time, the American High Efficiency Cyclone Dust Collector (long cone type) gives you the low initial cost and low operating cost of a cyclone type dust arrester plus the high efficiency that is lacking in the ordinary large diameter, short cone cyclone.

Actual collecting efficiency of this amazing new unit is the same as obtained in the average wet dust collector and is within a small percentage of the results obtained with filter type collectors.

Naturally we don't expect you to become as enthusiastic as we are about the unusual efficiency of this collector without first submitting it to a test demonstration on your own problem. But we promise to surprise you with it if you will give us that opportunity.

There is no obligation of course in asking for either the test or literature. Write for Circular No. 32 today.

American
FOUNDRY EQUIPMENT CO.
571 S. BYRRIT ST. MISHAWAKA, IND.

When inquiring specify CEP2351... see information request blank, pgs. 16-17



Small
WEIGHT LOSSES
Eat up
BIG PROFITS

Model 1091—1" to ounce indicator travel regular. Total capacity 5 lb. Wide choice of commodity equipment. Also available in center tower type.

● A slight fraction of an ounce loss is hardly noticed during an operation... but, multiplied many times by repeated operations, it shows up in big RED figures on the balance sheet. That's why it is so imperative for you to investigate how completely the new Toledo Speedweigh entirely solves problems of both accuracy and speed for the first time. Mail coupon now.

NO SPRINGS TOLEDO SCALES HONEST WEIGHT

Send now for illustrated descriptive bulletin on Toledo Speedweigh. No obligation. Toledo Scale Company, Industrial Scale Division, Toledo, Ohio.

Name _____

Address _____

City _____

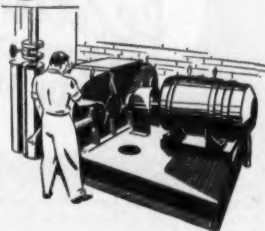
State _____

EP-64

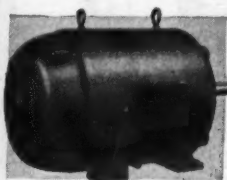
When inquiring specify CEP2359... see information request blank, pgs. 16-17

Enclosed, Fan Cooled RELIANCE^{AC} DC MOTORS

Where motors are exposed to dirt, iron dust, oil, and moisture these protected motors require less attention and show better records for steady operation. Windings stay clean and air gaps clear. They provide low-cost insurance against lost production and excessive maintenance... Motors are interchangeable in all mounting dimensions in most cases with standard open motors of the same rating.



For details get Bulletins No. 120 (A-c.) and No. 214 (D-c.)



Type AA, Enclosed, Fan-cooled Reliance Induction Motor



Type T, Enclosed D-c. Reliance Motor for constant and adjustable-speed service

Reliance Electric & Engineering Co.

1092 Ivanhoe Road

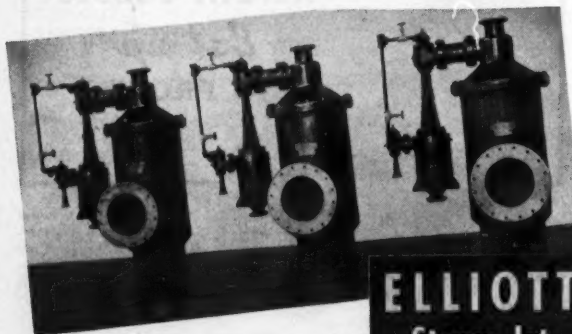
Cleveland, Ohio

Branches and Representatives in Principal Cities



When inquiring specify CEP2360... see information request blank, pgs. 16-17

Vacuum producing equipment to handle corrosive gases—



THESE THREE UNITS

are typical of numerous similar vacuum producing units which have been furnished for use in connection with processes for the concentration of sulphuric acid. The countercurrent barometric condensers are made of antimonial lead, while the two-stage ejectors may be made of special materials such as Ni-Resist, stainless steel, Duriron.

Elliott ejectors for many years have been used for maintaining vacuum in a great variety of chemical and industrial processes. Ejectors of standard design can be made of any metal that can be cast and machined.

If You Have a Difficult Problem, Consult Us
G-388

ELLIOTT
Steam Jet
EJECTORS



ELLIOTT
COMPANY

Heat Transfer Dept.
JEANNETTE, PA.
District Offices in
Principal Cities.

When inquiring specify CEP2361... see information request blank, pgs. 16-17

New Literature (Con.)

Double Cone Blender

A chart listing sizes, horsepower, weight and other pertinent data is included in this four-page, two-color bulletin on double cone blenders for processing and blending such dry materials as chemicals, paper and pulp, pharmaceuticals, rubber, plastics, graphite, etc. Laboratory model is also shown along with double ribbon mixers, laboratory jar mills, paste mixers, ball mills and portable agitators. Bulletin is available.

H. K. PORTER CO., Dept. CEP, 4935 Harrison St., Pittsburgh, Pa.
When inquiring specify CEP2362... see information request blank, pgs. 16-17

Galvanized Steel Hose and Couplings, Bronze Steam Hose and Clincher Couplings

Two bulletins illustrate and describe these two types of flexible metal hose and couplings. Detailed specifications, price lists, application photos and diagrams are included in each booklet. Bulletin 59-G is for the bronze steam hose and Bulletin 52-G for the galvanized steel hose, and both are available on request.

PENNSYLVANIA FLEXIBLE METALLIC TUBING CO., Dept. CEP, 72nd & Powers Lane, Philadelphia, Pa.

When inquiring specify CEP2363... see information request blank, pgs. 16-17

Grabs . . . For Overhead Materials Handling

Jammed full of large illustrations of the equipment in use, this 8-page, color booklet describes a variety of grabs and handling devices for many kinds of materials . . . discusses cab-controlled motor driven grabs and standard grabs and lifts for many purposes in overhead handling of materials. It suggests many other applications. Available on request.

CLEVELAND TRAMRAIL DIV., CLEVELAND CRANE & ENG. CO., Dept. CEP, Wickliffe, Ohio.

When inquiring specify CEP2364... see information request blank, pgs. 16-17

Microscope Accessories

In 30 pages this new bulletin illustrates and describes Apochromatic Objectives, Compensating Eyepieces, Eyepiece Holders, Micrometer Discs, Slides, etc., etc. Optical systems for the microscope are discussed. Two pages are devoted to prices. Available on request.

BAUSCH & LOMB OPTICAL CO., Dept. CEP, Rochester, N. Y.

When inquiring specify CEP2365... see information request blank, pgs. 16-17

14 Reasons Why Automatic Lubrication

In addition to discussing the basic reasons for efficient automatic lubrication of modern machines, this 12 page leaflet lists 14 reasons why automatic metered lubrication increases output, lowers operating costs and increases quality of product. Available on request.

BIJUR LUBRICATING CORP., Dept. CEP, Long Island City, N. Y.

When inquiring specify CEP2366... see information request blank, pgs. 16-17

Hydraulic Lift Truck, Pallet Type

Single-faced and double-faced pallets can be used on these two types of hydraulic lift trucks. Specifications are given for each type, plus descriptive material concerning the major features. A suggested design is shown in a drawing for the two-faced pallet for use with one of these trucks. Bulletin No. 117 is available.

LYON IRON WORKS, Dept. CEP, Greene, N. Y.

When inquiring specify CEP2367... see information request blank, pgs. 16-17

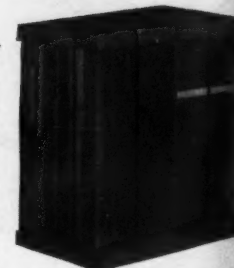
132 Portable Electric Tools

Sixty pages, illustrated with scores of photographs, show this manufacturer's complete line of 132 portable electric tools with accessories. The booklet is attractively printed, in color. Detailed facts and figures are given for each tool . . . prices are quoted. Many new and improved items appear in this new catalog.

BLACK & DECKER MFG CO., Dept. CEP, Towson, Md.

When inquiring specify CEP2368... see information request blank, pgs. 16-17

HOLD UNIT COSTS ~~DOWN~~ with SIGNODE



● Immediate savings in the shipping room, as an offset to some part of rising unit costs on the production line, are Signode's contribution to industry in this year of rapidly growing production demands. In just a few days the Signode System of Tensional Steel Strapping can be working to protect profits—offsetting increased production costs with up to 40% savings in packaging materials—up to 75% saving in carloading costs—while providing added protection to products in transit.

Available Immediately—Signode savings are available now—in no more time than it will take a Signode man to recommend the right Signode applications to your products and problems. Write today for full details.

SIGNODE STEEL STRAPPING CO.
Chicago, Ill.: 2607 N. Western Ave.
Brooklyn, N. Y.: 370 Furman St.
San Francisco, Calif.: 455 Bryant St.

40 OFFICES THROUGHOUT UNITED STATES AND CANADA

When inquiring specify CEP2369... see information request blank, pgs. 16-17

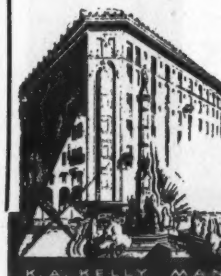
It Pays to Stay at HOTEL LAFAYETTE Buffalo's Best Located Hotel

Right in the heart of Theater, Shopping and Business district. Fine rooms, comfortable beds, excellent food at moderate prices in our dining rooms and coffee shop. Garage across the street. The Hotel that has "everything."

LOW RATES

Single	Double
\$2.50 up	\$4.00 up

Special rates for 4 or more
Write for Folder R.



Hotel **LAFAYETTE**
K. A. KELLY, MANAGER
BUFFALO, N. Y.

When inquiring specify CEP2370... see information request blank, pgs. 16-17

BELT TROUBLE?

**DO THIS NOW and
GET MORE POWER
THROUGH BELTS...**

**Cut Out Slip...
Reduce Shutdowns
FREE TRIAL OFFER**

CLING-SURFACE BELT TREATMENT

- ▶ MAKES BELTS PULL
RUNNING SLACK
- ▶ CONTAINS NO
ROSIN OR PITCH
- ▶ COSTS LITTLE...
SAVES MUCH

Are you wasting power, time and labor due to tight-running belts? They cause bearing strain, break-downs, excessive operation cost. Stop this trouble in 30 days with Cling-Surface Belt Treatment.

CLING-SURFACE BELT TREATMENT

Penetrates... Waterproofs... Lubricates

Thirty days after initial application shows amazing reduction in belting interruptions. No clogging or drying out.

**Made by Largest Exclusive Liquid Belt Treatment
Manufacturers in U. S. A.—Used world over**

We make this one product only, scientifically developed to save you belt trouble and operation cost by putting new life into belts, permitting slack running. Write for sample:

**Send for FREE
Trial of
CLING-SURFACE
...End Belt
Troubles NOW!**

CLING-SURFACE CO. (Since 1896)
1047 Niagara Street, Buffalo, N. Y.
**RUN BELTS SLACK and
Save Power—Use
CLING-SURFACE**

When inquiring specify CEP2371... see information request blank, pgs. 16-17

Simplicity

...THE KEY TO DEPENDABLE LUBRICATION



The positive, piston-displacement Farval Valve is extremely simple in construction and operation.

- It has but 2 moving parts
- contains no springs nor check valves
- is adjustable and indicating
- will handle either oil or grease
- is fully hydraulic in its operation.

The simple, rugged Farval Central Pumping Unit completely lubricates all bearings in less than one minute.

Farval Systems will reduce labor of oiling • eliminate waste of lubricant • increase production • reduce repairs and maintenance • prolong the life of equipment.

Farval thus quickly pays for itself and continues to earn at the same rapid rate throughout the years. The Farval Corporation, 3257 East 80th Street, Cleveland, Ohio.

Affiliate of The Cleveland Worm & Gear Company, Manufacturers of Automotive and Industrial Worm Gearing

FARVAL CENTRALIZED
SYSTEMS OF
LUBRICATION

When inquiring specify CEP2372... see information request blank, pgs. 16-17

New Literature (Con.)

Portable Industrial Electric Heater

Bulletin No. 15 shows this industrial heater in natural color together with drawings showing suggested applications. Complete specifications, dimensions, capacity ratings and major features are shown. Bulletin is available on request.

AMERICAN FOUNDRY EQUIPMENT CO., Electric Air Heater Div., Dept. CEP, 573 S. Byrkit St., Mishawaka, Ind.

When inquiring specify CEP2373... see information request blank, pgs. 16-17

Screenings Grinder for Pulp and Paper Mill Service

Four-page folder describes these screenings grinders for preliminary defibering work ahead of the Jordans. Drawing shows cross-section of machine with operating details. Other products shown in folder include bark shredders, re-chippers and salt cake crushers. Bulletin 749 is available.

JEFFERY MFG. CO., Dept. CEP, Columbus, Ohio.

When inquiring specify CEP2374... see information request blank, pgs. 16-17

High-Capacity High-Pressure Dischargers

Eight page color leaflet describes this positive acting trap for handling large quantities of condensate or carryover at relatively high pressures. Photos and drawing show operation. Applications are discussed. Data table gives maximum discharge capacities—pounds per hour. Available on request.

COCHRANE CORP., Dept. CEP, 17th & Allegheny, Philadelphia, Pa.

When inquiring specify CEP2375... see information request blank, pgs. 16-17

Spherical Roller Bearings

36-page catalog illustrates and describes these spherical roller bearings. First 20 pages of catalog are devoted to illustrations of roller bearing applications in mining, crushing, steel, paper, oil, etc. lines. Remainder of booklet contains information on bearing selections, time-saving computations, and drawings of various types of bearings. Catalog is available.

S K F INDUSTRIES, INC., Dept. CEP, Philadelphia, Pa.

When inquiring specify CEP2376... see information request blank, pgs. 16-17

Non-Shrinkable Alloy Steel

Two-color, pocket-size folder gives technical data on this alloy steel for minimizing distortion of tools and dies. Working data are shown with chart showing the tempering range. An example of the steel's accuracy is shown by diagram and data in test.

JESSOP STEEL CO., Dept. CEP, Washington, Pa.

When inquiring specify CEP2377... see information request blank, pgs. 16-17

Acid-Proof Brick and Tile

Attractive folder shows several styles of acid-proof brick and tile for acid-resistant structure. Types of material include special shapes, wedge, key, side skew, soap, feather edge, arch, straight, etc. with dimensions and details for each type. A list of recommended uses is included in folder. Bulletin is available.

HARBISON-WALKER REFRACTORIES CO., Dept. CEP, Farmers Bank Bldg., Pittsburgh, Pa.

When inquiring specify CEP2378... see information request blank, pgs. 16-17

Performance Data on Steam Unit Heater

Data on the performance of this completely redesigned line of steam unit heaters is given in detail... photographic illustrations show unit... 12 exclusive features are listed... technical data is presented with detailed drawings and tables. This four page leaflet is comprehensively prepared... printed in color. Available on request.

AUTOVENT FAN & BLOWER CO., Dept. CEP, 1805 N. Kostner Ave., Chicago, Ill.

When inquiring specify CEP2379... see information request blank, pgs. 16-17

Adding Men?

**Then Enlarge
Your Washing
Facilities
with**



BRADLEY WASHFOUNTAINS

Bradleys serve 8 to 10 persons simultaneously, yet insure maximum sanitation because running water is furnished each person from a central sprayhead. To install a 10-person Bradley Washfountain requires no more piping connections than a conventional one-person basin.



About 25 per cent less floor space is required, and records of many plants using Bradley Washfountains show that water consumption is reduced an average of 70 per cent. 1941 Catalog now ready. BRADLEY WASHFOUNTAIN CO., 2257 W. Michigan St., Milwaukee, Wis.

When inquiring specify CEP2380... see information request blank, pgs. 16-17



CHLORINATION IS TOUGH

So Pfaudler Glass-Lined Equipment gets the call—resistant to all acids (except HF) in any concentration or at any temperature.

Pfaudler equipment in your plant will resist the corrosive action of destructive acids, except hydrofluoric. That is important in two major ways—it prevents corrosion, thus protecting a capital investment for a prolonged period, besides eliminating contamination and discoloration of your chemicals.

Pfaudler Glass-Lined equipment actually increases the yield of some products by eliminating undesired catalysis. And, of course, it is unequalled for sanitation and easy and complete cleanability.

If your acid processing demands complete freedom from metals—and even if it does not—the wide variety of standard processing units, which Pfaudler alone has made available, warrant your careful investigation. As a starter, why not write for our complete catalog, No. 792.

THE PFAUDLER CO., Executive Offices: Rochester, N. Y. Factories: Rochester, N. Y. and Elyria, O. Branch Offices: New York, Boston, Philadelphia, Chicago, Cincinnati. Pfaudler Sales Co., San Francisco and Los Angeles. Representatives in principal cities.

P F A U D L E R

When inquiring specify CEP2381... see information request blank, pgs. 16-17



THESE are the results which Sly Dust Control has brought The Fairbanks Co. Exhausting the dust and dirt from tumbling mills in their foundry, these Sly Dust Filters have produced

better working conditions for employees, have improved general shop operations and have helped make a cleaner product.

That is what Sly is doing nationwide. Sly Dust Filters collect over 100 different kinds of dust in 56 industries. They produce better working conditions—aiding quality and quantity of production, reducing operating costs, adding to saleability of product. Yet Sly Dust Filters are not expensive.

Ask for Bulletin 98 . . . tell us your problems so we can write you fully.

SLY THE W. W. SLY MFG. CO.
4754 TRAIN AVE., CLEVELAND, O.
INDUSTRIAL DUST CONTROL

When inquiring specify CEP2382 . . . see information request blank, pgs. 16-17

AN Outline OF THE

COE DRAINATOR

the ADVANCED STEAM TRAP with NO MOVING PARTS...

SPEEDED manufacturing schedules demand this better steam trap. Its higher efficiency eliminates common bottlenecks and steps up production to new high levels.

Greater air eliminating capacity permits quicker starts of cold equipment.

Capacity for handling a larger volume of condensate gives increased transfer of heat.

Continuous discharge of both air and condensate maintains high efficiency.

The complete absence of moving parts avoids inspection costs and annual repair bills.

A glance at the gauge glass indicates that the Drainator is efficiently performing the functions for which it was purchased—a question that is not easily answered in relation to conventional steam traps.

Get THE COMPLETE Story

Write to The COE MFG. Co.
499 Bank St., Painesville, Ohio

When inquiring specify CEP2383 . . . see information request blank, pgs. 16-17

New Literature (Con.)

Rotary Positive Blowers

8-page presentation explains the basic principle of operation, gives capacity and power curves . . . also illustrates and describes many types and sizes and accessories. Detailed data charts give net capacities at listed pressures and speeds. Well done, in color. Available on request.

ROOTS-CONNERVILLE BLOWER CORP., Dept. CEP, Connersville, Ind.

When inquiring specify CEP2384 . . . see information request blank, pgs. 16-17

Clamshell Buckets

Two 36-page catalogs cover this manufacturer's line of redesigned and standardized clamshell buckets. Many types of buckets are shown with scores of application pictures. Summaries list pertinent information on bucket details and payload performance. Added to description of bucket construction is useful data on equalizer bars, counterweights, and bucket teeth. Catalog 1693 covers single drum hoists and catalog No. 1757 describes two-line, lever arm buckets. Both booklets are available on request.

BLAW-KNOX CO., Dept. CEP, Blaw Knox, Pa.

When inquiring specify CEP2385 . . . see information request blank, pgs. 16-17

Horizontal and Vertical Shaft Centrifugal Pumps

24-page, two-color booklet illustrates and describes this line of industrial pumps "for pumping everything but clear, inactive liquids." 5 types of pumps in 18 sizes are included with detailed specifications for each. Several pages of data show operating curves, and individual photos show specific features of these pumps. Bulletin No. 940 is available on request.

AMERICAN MANGANESE STEEL DIV. of American Brake Shoe & Foundry Co., Dept. CEP, Chicago Heights, Ill.

When inquiring specify CEP2386 . . . see information request blank, pgs. 16-17

Single Beam Cranes Illustrated and Described

This 24 page, plus cover, booklet gives detailed information on the manufacturers' line of single beam cranes in a wide variety of types and sizes. Numerous good sized photographs show typical applications. Numerous data tables give capacities, hoisting speeds, maximum lift, etc., etc. The booklet is well done, in color, on good stock, making it interesting and useful. Available on request.

SHEPARD NILES CRANE & HOIST CORP., Dept. CEP, Montour Falls, N. Y.

When inquiring specify CEP2387 . . . see information request blank, pgs. 16-17

"Chemicals from Coal" Data Sheets

In booklet form, this company presents the physical and chemical properties of those compounds which they offer to industry . . . as data sheets of "Chemicals from Coal." Twenty-five such compounds are thus described. Booklet is pocket-size . . . 28 pages plus cover . . . convenient to use or carry.

TAR & CHEMICAL DIV., KOPPERS CO., Dept. CEP, Koppers Bldg., Pittsburgh, Pa.

When inquiring specify CEP2388 . . . see information request blank, pgs. 16-17

Turbine Process Pumps

4-page leaflet gives details of two types of single-stage pumps for moderate pressures and high temperatures which are especially adapted for refinery and other process pumping service. Engineering drawings plus detailed specifications complete the leaflet. Bulletin No. 3300 is available.

DAYTON-DOWD CO., Dept. CEP, Quincy, Ill.

When inquiring specify CEP2389 . . . see information request blank, pgs. 16-17

Check Off Your FILTRATION PROBLEM

- ✓ Recovery of solids in firm cakes that save on subsequent drying costs.
- ✓ Backwashing the cake to recover or remove all liquids.
- ✓ Perfect Clarification and Decolorizing
- ✓ Use of Filter Aids and carbon to speed up or improve clarification for thick or viscous materials.
- ✓ Filtration at High Pressure (up to 1000 lbs.) for thick or viscous materials.
- ✓ Heating or Cooling the material during filtration.
- ✓ Sluicing out undesirable solids to reduce cleaning time.

You can get practically any combination of these functions in a Shriver Filter Press, built to your exact processing and capacity requirements in any metal, wood, rubber or plastics. No filter is more adaptable in meeting so many filtration variables—none more economical to operate in laboratory or plant.

GET THE FACTS
Write for this book.



T. SHRIVER & COMPANY
346 Hamilton St. Harrison, N. J.

Shriver FOR BETTER FILTRATION
FILTER PRESSES

When inquiring specify CEP2390 . . . see information request blank, pgs. 16-17

LINTERN GLOWLITES Industry's Signal for greater Safety, Profits, Efficiency

A variety of uses, covering literally thousands of individual applications, account for the widespread popularity of Lintern Glowlites. They show when a machine is on or off; indicate normal or abnormal operations (with regard to temperature, pressure, speed, etc.); control plant traffic; locate safety devices; warn of danger points; and act as a call signal system, especially in noisy plants.

In addition to their application for almost any job, Glowlites are preferred because of their low initial cost, distinctive signal strength, and reliable service, resulting from exceptionally sturdy construction, at a minimum of maintenance. Models to fit all needs.

Among the many specific uses listed in our catalog, you are almost certain to find profitable applications for Glowlites in your plant. Write for your copy now.

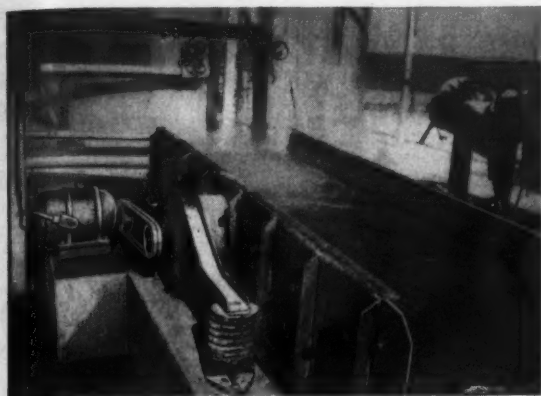


THE LINTERN CORPORATION

7960 Lorain Avenue

Cleveland, Ohio

When inquiring specify CEP2391 . . . see information request blank, pgs. 16-17



Solids Out of Liquids the ROBINS Way

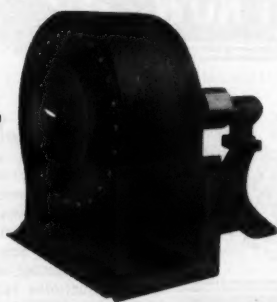
The Robins method of separating solids from liquids by rapid vibration over a fine screen surface has proven most effective and efficient. It has improved product, reduced process cost and cut down equipment investment in fish and vegetable oil reclamation, separating cement slurry, de-watering of rubber in process, and in other dehydrating operations in the chemical industry. Robins Engineers will gladly study your processing operation and quote you facts and figures on separating solids from liquids THE ROBINS WAY.

Send for Bulletin 107 "LIQUID SCREENS"

ROBINS CONVEYING BELT CO. :: **PASSAIC, N. J.**
Boston Charleston, W. Va. Chicago Cleveland Detroit New York
Philadelphia Pittsburgh San Francisco

When inquiring specify CEP2392 . . . see information request blank, pgs. 16-17

Looking for a Tough, Economical LEAD-LINED FAN?



Maybe a lead lining in your fans can whip those corrosive fumes—and put an end to the high cost of fans. In dozens of cases, "Buffalo" Lead Lined Fans are saving real money—lasting many times longer than ordinary fans. And at the same time doing their job with record efficiency. Just state your problem—let Buffalo's 60 years of fan experience help you solve it.

BUFFALO FORGE COMPANY
160 MORTIMER ST., BUFFALO, N. Y.
Branch Engineering Offices in Principal Cities
Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

"Buffalo" SPECIAL FANS
for the Chemical Industry

When inquiring specify CEP2393 . . . see information request blank, pgs. 16-17

Tri-Clad Polyphase Induction Motor

New Mechanical & Electrical Protective Features

Features — New design of motor includes more complete protection than heretofore available through the use of a cast-iron frame; major advance in the insulation of current carrying parts; improved bearing design and lubricating arrangements. Motors also have cast-aluminum rotor, pressure-relief system of greasing for ball-bearing motors, etc.



Description—Mechanical protection includes use of cast-iron frame of the box type in place of the open conventional frame. End shields are designed to match frame and are enclosed above centerline. Frame and end shield arrangement minimizes contact of vital motor parts with foreign material such as lubricants, coolants, chips, tacks, etc. Lower motor temperature was secured through improved air deflectors and fan designs combined with double-end ventilation, which draws in air at both ends. Motor operates well within standard 40 C. temperature rise.

New "Formex" magnet wire is used on all ratings of the motor. "Formex" is a tough, heat- and solvent-resisting magnet wire. Comparative aging tests of Formex wire with ordinary enameled wire show a superiority for Formex in ratio of 30 to 1. After motor coils have been wound with Formex wire, they are given a bonding and impregnating coat of a synthetic resin varnish. 19-month test of this varnish, when exposed to concentrated action of oil, showed no softening.

Sleeve bearings of shorter diameter give proper proportion of length to diameter and shaft deflections inside bearing can be maintained at value less than thickness of oil film. Bearing is rigidly supported through 360 deg. and is locked in dust-tight and oil-tight enclosure by removable pin.

GENERAL ELECTRIC CO., Dept. CEP, Schenectady, N. Y.

When inquiring specify CEP2394 . . . see information request blank, pgs. 16-17

8 mm. Roller Chain

1100 Pounds Average Ultimate Strength

Uses—Weighing only half as much (1-¾ ounces per foot) as smallest power transmission chain previously produced, small chain was developed for services where other roller chains are too heavy or bulky; for positive driving of light weight machinery, for timing mechanisms, for precision instruments and equipment, for facsimile models, etc.



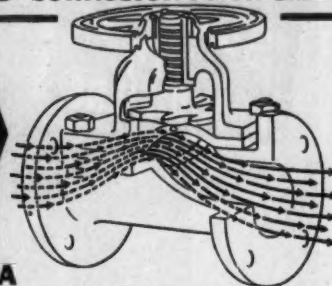
Description—No. 88 Roller Chain has 0.315" (8 mm.) pitch, with rollers 0.197" diameter by 0.125" width, and 1100 lbs. average ultimate strength (actual size shown in cut). Small chain is made to same standards as maker's larger chains of ¾" to 2-½" pitch, inclusive. Chains are case hardened and heat-treated. The 192 individual parts in each foot of chain are assembled to a total length tolerance of only plus .0156", minus .000.

DIAMOND CHAIN & MFG. CO., Dept. CEP, 411 Kentucky Ave., Indianapolis, Ind.

When inquiring specify CEP2395 . . . see information request blank, pgs. 16-17

VALVES for MAXIMUM CORROSION PROTECTION

Over 500
Different
Service
Applications



HILLS-McCANN

.. SAUNDERS' PATENT VALVES

Distinctly designed for the flow control of chemicals, semi-solid substances, viscous and volatile substances, air, water, etc. These valves do away with the ever-present fault of ordinary valves by their patented diaphragm closure.

1. No seats, discs, plugs, are used.
2. No stuffing boxes or stem packing necessary.
3. Total absence of metal-to-metal sealings.
4. Free unobstructed liquid area.
5. No sticking or corroded working parts.
6. No ports or pockets for thru-put to accumulate in and cause leaks.
7. Available in any alloy construction, or bodies lined with lead, rubber or glass.
8. Positive drip-tight shut-off.
9. Low maintenance cost.

Write for 16 page booklet containing engineering specifications and service recommendations.

HILLS-McCANN Co.
2370 NELSON STREET, CHICAGO
PROPORTIONING PUMPS • CENTRIFUGAL PUMPS • THERMOMETER
WELLS • VALVES • FORCE-FEED LUBRICATORS • NON-FERROUS ALLOYS

When inquiring specify CEP2396 . . . see information request blank, pgs. 16-17

It's Easy to Hear You in this Acousti-Booth



• When you use your shop telephone, are you bothered by the noises of nearby machinery?

If so, investigate the Burgess Acousti-Booth . . . the doorless booth with the acoustic lining that soaks up noise. Hundreds of plants have installed Burgess booths to provide "zones of quiet" for their factory telephones. Employees hear distinctly.

Mistakes, due to telephone errors, are avoided.

We shall be glad to send an illustrated catalog showing various Burgess models and names of satisfied users. Just mail coupon.

Mail Coupon for Free Booklet

Please send illustrated catalog describing the Burgess Doorless Acousti-Booth and how it works.

Name

Firm Name

Street-City

Burgess Battery Company, 523 W. Huron St., Chicago.

BURGESS ACOUSTI-BOOTH
Manufactured under Burgess Patents

When inquiring specify CEP2397 . . . see information request blank, pgs. 16-17



QUICK FACTS

- 1** END DRY AIR COMPLAINTS. Reduce breakage of fibrous materials . . . Prevent loss of weight . . . Improve workability of materials . . . Reduce dust and static hazards and nuisance.
- 2** EASY TO APPLY. Put humidity right where you want it. As easy to use as unit heaters. Completely automatic.
- 3** A QUALITY PRODUCT. All parts built for heavy duty industrial service. Finest humidistat obtainable.
- 4** FREEDOM FROM COMMON TROUBLES. No floats to stick or nozzles to clog with scale. No precipitation of hard mineral dust.
- 5** LOW COST. Units complete with humidistat, solenoid control valve, fan, steam strainer, and drainage trap list at \$100.00. Discounts on application. Get our new 8 page educational bulletin. ARMSTRONG MACHINE WORKS, 880 Maple St., Three Rivers, Mich.

When inquiring specify CEP2398 . . . see information request blank, pgs. 16-17

Get a modern solution for your BAG CLOSING PROBLEMS



AS THE pioneer manufacturer of bag closing machines, Union Special Machine Company over a long period of years has assembled a store of information and a line of standard and special machines that make solution of most BAG CLOSING PROBLEMS merely a question of knowing YOUR REQUIREMENTS. Ask for a copy of the interesting new bulletin pictured above.



UNION SPECIAL MACHINE CO.

442 N. FRANKLIN ST.

CHICAGO, ILLINOIS

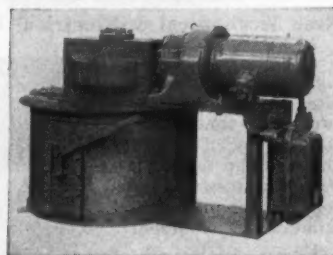
UNION SPECIAL

When inquiring specify CEP2399 . . . see information request blank, pgs. 16-17

Paint & Paste Mixer

Explosion-Proof Motor and Controls

Features — Unit shown is an 80 gal. heavy duty paint mixer assembled in-to compact unit. Mixer has machine-cut totally-enclosed gears, water-tight discharge gate, explosion-proof motor and conveniently mounted explosion-proof controls.



Description—These mixers are available in all capacities, ranging from small laboratory models to large production sizes. They are made in plain or alloyed steels with any type of motor drive. Hopper of machine shown has hinged cover and gear case is located above this cover. A vertical shaft and motor drive operates a finger-type stirrer running close to sides and bottom of hopper. Discharge gate has square, water-tight opening. Complete specifications and details available.

H. K. PORTER CO., Dept. CEP, 4935 Harrison St., Pittsburgh, Pa.

When inquiring specify CEP2400 . . . see information request blank, pgs. 16-17

Plastic Packing

Has Reinforced Tape Vulcanized On Back

Uses — Packing is made in six styles for special purposes; No. 1 for general service — air, water, steam, mild chemicals, etc., where temperatures do not exceed 550 deg. F. No. 2 is for superheated steam, hot oils and hot gases for temperatures higher than 550 deg. F. No. 5 is for chemicals, caustic alkalis, and acids. Non-metallic. No. 6 is for superheated steam or gases, where temperatures do not exceed 750 deg. F. Non-metallic packaging is recommended for centrifugal and rotary services such as centrifugal feed pumps, low pressure steam rods, valve stems, centrifugal and rotary pumps, and expansion joints.

Features—Vulcanized tape reinforcement replaces old frictional woven cotton jacket and now a non-frictional surface bears directly against the moving part. Due to this tape backing packing is extremely pliable and can be bent around small diameter rods and shafts without fracturing or cracking, or formed into small I.D. rings without distortion.

Description—Packing is a dry-graphited plastic material made from pure, long-fibre asbestos, antifrictional metal particles and special binders. It contains no oils that can be driven off by heat or pressure and packing flows easily under gland adjustment. Each of six types is available in sizes from 1/4" to 1" graduated by sixteenths, in coils, standard length spirals or in die-formed rings or sets to stuffing box dimensions.

CRANE PACKING CO., Dept. CEP, 1800 Cuyler Ave., Chicago, Ill.

When inquiring specify CEP2401 . . . see information request blank, pgs. 16-17



INTRA-PLANT TRANSPORTATION TROUBLE?



SWITCH TO DOENUT WHEELS

Preserve floors, reduce effort, stop noise and prevent jolting with this new Doenut Wheel with outside valve. Unexcelled for handtrucks, wheelbarrows, cylinder trucks, greasing equipment and other types of mobile units. No matter how carelessly tire is allowed to run under-inflated, valve cannot be cut or damaged by "creeping". Punctures repaired without removing tire from rim.

Available in three sizes: 10" x 2.75"; 12" x 3.30"; 16" x 4.40". Developed by originator of the airwheel for airplanes. Write for details today.

MUSSELMAN PRODUCTS CO.
6324 ST. CLAIR AVE. CLEVELAND, OHIO

When inquiring specify CEP2402 . . . see information request blank, pgs. 16-17

Hot Water RIGHT NOW



"Nothing else like it" for:

ASK those who install the Johnson "Instant" Steam Water heater why they use it and they will say in substance: "Because nothing else fills the bill quite so well!"

Look at its construction and you'll see why they say it. Long water travel in constant contact with steam heated surfaces is accomplished by a few simple, rugged, trouble-free parts instead of the usual lightweight multi-tube construction. Result: It can be operated on high pressure steam (no reducing valves needed)—up to 150 lbs. steam pressure in standard types; up to 250 lbs. in special types. This means more capacity from a given size of unit; simpler installation. It also means remarkably trouble-free service when used on low pressure steam.

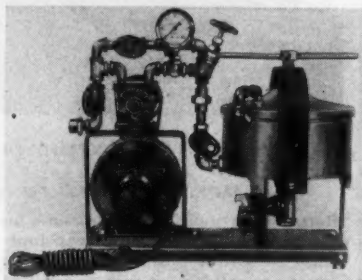
Uses of the Johnson "Instant" Heater are suggested opposite. If you are confronted with any of these needs just remember that nothing else fills the bill quite so well!"

Bulletin covers dollar-saving suggestions

Product of The Johnson Corporation
626 WOOD ST., THREE RIVERS, MICHIGAN

When inquiring specify CEP2403 . . . see information request blank, pgs. 16-17

SPARKLER Horizontal-Plate FILTERS • SURE CURE FOR FILTERING PROBLEMS!



FROM PILOT PLANT THROUGH PRODUCTION

Forget filtering worries. There's a Sparkler Horizontal-Plate Filter to meet every requirement in your business. Sparkler equipment is engineered to cut filtering time, improve quality and reduce costs. It filters anything more efficiently than any other unit on the market. Advantages include greater speed and capacity; compactness; portability; intermittent service without disturbing clarity; savings in filter aids; and easy cleaning.

Capacities from 1 pint to 10,000 g.p.h.

Write for Full Information Today.

SPARKLER Manufacturing Company

1218 WEBSTER AVENUE CHICAGO, ILL.

When inquiring specify CEP2404... see information request blank, pgs. 16-17

SAVE MAN POWER! USE DRACCO PNEUMATIC CONVEYORS

Man power is becoming a more important factor each day. DRACCO Pneumatic Conveyors will handle chemicals and eliminate a serious labor headache. In many installations a DRACCO Pneumatic Conveyor and one man handle more efficiently materials that formerly required several men. The system is ALWAYS ready for INSTANT USE—no costly delays. DRACCO Pneumatic Conveyors reduce handling costs to the MINIMUM. It will pay to consult DRACCO Engineers. Why not write today?

Get
Bulletin
No. 526



Write for Bulletin No. 526.

DRACCO CORPORATION

Successors to The Dust Recovering & Conveying Co.

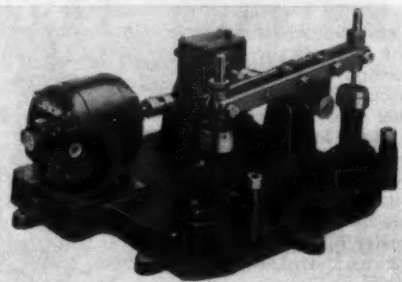
4040 East 116th Street, Cleveland, Ohio New York Office: 130 West 42 Street

PNEUMATIC CONVEYORS • DUST COLLECTORS

When inquiring specify CEP2405... see information request blank, pgs. 16-17

Proportioning Pump Unique Check Valve Eliminates Vapor Lock and Pressure Drop Through Check

Uses — Addition to present line of proportioning pumps to provide a unit in the low price field which offers small capacity at reasonably high working pressures.



Features—Liquid ends are of plunger displacement principle and incorporate outside, vertical composite check valves, which are available with either single or double suction and discharge. This check valve is designed to eliminate vapor lock and pressure drop through check as well as promote handling of solids in suspension. Pump has extra-deep, outside, end-packed type stuffing box fitted when necessary with lantern ring for introduction of lubricant into the packing.

Performance — Compact, rugged construction permits service at pressures as high as 1200 lbs. per sq. in. Capacities per feed are variable from a few drops per stroke, utilizing a 1/4" plunger, to as high as 8 gallons per hour with a 3/4" plunger.

Description—Actuating mechanism embodies a balanced walking beam type rocker arm, hardened steel roller contact points and "Oilite" type bushings. This "R" Type pump is of the constant speed, variable stroke type, with capacity variations affected by means of adjustable plunger buttons. Pump can be obtained in single or multiple feed assemblies; standard units can be had with 1, 2, 3 or 4 independently actuated pumping units.

HILLS-McCANN CO., Dept. CEP, 2370 Nelson St., Chicago, Ill.

When inquiring specify CEP2406... see information request blank, pgs. 16-17

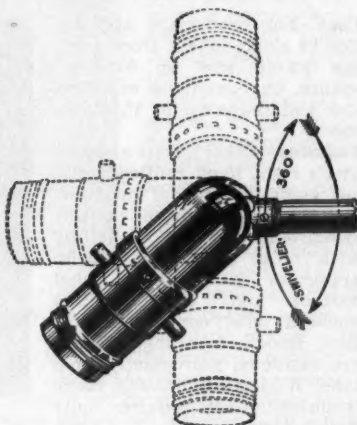
Swivel Light Socket Adjustable To Full 90 Deg. Right Angle

Features — Socket, known as "Swivelier," can be rotated to describe a complete 360 deg. arc when adjusted at any angle; adjustable to full 90 deg. right angle. Wires cannot twist because of special stop. Unit will "stay put" in any position.

Description—Sockets come in three standard finishes: dipped brass, brush brass and electro nickel. There are no set screws, wing nuts or friction washers to work loose or wear. Units are wired the same as the ordinary brass shell sockets; nipple units replace the usual 1/8" and 1/4" rigid sockets. Brass shell Uno Thread permits attachment to any style shade.

RELiance DEVICES CO., Dept. CEP, 140 Liberty Street, New York, N. Y.

When inquiring specify CEP2407... see information request blank, pgs. 16-17



INDUSTRY CHOOSES YALE!

EXCLUSIVE
FEATURES MAKE
NEW "TRANSLIFTOR"



the buy!

New hand lift truck brings you hydraulic release check, telescopic bar frame, selective lift and torsion-type rear link.

If your truck operators bought the materials handling equipment, their choice would be the new "Transliftor". The selective lift makes for easier operation—permits full strokes for quick lifts, short strokes for heavier loads.

You'll like this new heavy-duty truck, too. Its hydraulic release check never drops a load. It's fast—economical to operate—safe. Capacities 3,500 to 5,000 lbs.

The "Transliftor" is just one model in the Yale Hand Lift Truck line. Send for the new FREE catalog telling about all of them. Or take advantage of the FREE TRIAL OFFER.



THE YALE & TOWNE MFG. CO.
4530 Tacony Street, Philadelphia, Pa.

☐ Please send the "Transliftor" for 15-day FREE TRIAL.
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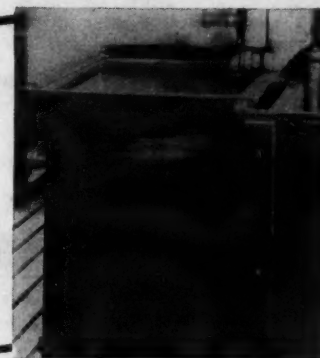
Address _____

When inquiring specify CEP2408... see information request blank, pgs. 16-17

"NO CORROSION...."

"NO HARMFUL
EFFECT ON THE
SOLUTION"

... AND A
SUBSTANTIAL
SAVING IN
FIRST COST



After this tank, made of Lukens Nickel-Clad Steel, had been in service a year, the Chemist of the company stated, "The tank is used instead of a more expensive tank of solid corrosion-resisting metal which had been recommended. We have had no trouble with it. There has been no corrosion and the nickel-clad has no harmful effect on the solution." Fabricated from 3/16" thick plates of 20% Lukens Nickel-Clad Steel by Kalamazoo Sheet Metal Fabricating Co., Kalamazoo, Mich.

Write for data on Lukens Nickel-Clad Steel.

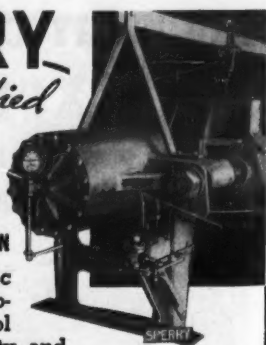
LUKENS STEEL COMPANY, World's Largest Plate Mill, 117 LUKENS BLVD., COATESVILLE, PA.



When inquiring specify CEP2409... see information request blank, pgs. 16-17

SPERRY

Simplified
HYDRAULIC
CLOSING



FOR FASTER PRODUCTION

A new Sperry Hydraulic Closing (type HC) to provide more precise control of filter press, greater safety, and assure more economical and speedier operation of the filtration cycle.

Connects to factory low pressure water system which provides pressure for opening and closing press. Sufficient power to move all plates and frames in a body. Hydraulic fluid is pumped only for final squeeze to desired pressure. Manipulation of one 4-way valve controls all movement of ram.

Write for complete details.

D. R. SPERRY & COMPANY, Batavia, Illinois
Filtration Engineers for over 40 Years.

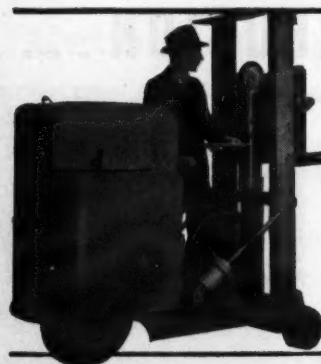
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205 E. 42nd St. New York
Telephone Murray Hill 4-3581

Western Sales Representative
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San Francisco, California

Send for
Filtration
Fact
Book

Contains
charts, data
and
practical
information
on industrial
filtration

When inquiring specify CEP2410... see information request blank, pgs. 16-17



For
**BETTER
TRACTION**
**LONGER
LIFE** specify
**GENERAL
Jumbo Jrs.**

♦ Users of this hydraulic lift truck, manufactured by the Howell Industrial Truck Co., Cleveland, O., report that it is practically impossible to spin the General Jumbo Jr. industrial pneumatic tire. Previously used solid tires would spin under heavy loads.

In addition, the Jumbo Jr. provides far greater tire life and valuable cushioning for the motor, and it will not pick up chips, filings, etc. from factory floors. General Jumbo Jr. will increase the efficiency of any industrial truck. Wide range of sizes and capacities will meet every factory hauling requirement. Write for new catalog and for list of manufacturers supplying equipment on Jumbo Jrs.

THE GENERAL TIRE & RUBBER COMPANY • AKRON, OHIO

GENERAL JR.
INDUSTRIAL BALLOON TIRES



TIRE
TUBE
WHEEL

Tires 8" to 24" overall diameter. Load capacity 150 lbs. to 1500 lbs. per tire. 2-4-6 and 8-ply with separate inner tubes and heavy duty wheels.

When inquiring specify CEP2411... see information request blank, pgs. 16-17

Automatic Contact Pressure Switch

Has Mercury to Mercury Contact

Uses—Switch is for opening or closing an electrical circuit under predetermined low or high pressure conditions. Designed for service on non-corrosive liquids or gases under pressure.

Features — Switches fitted with mercury tubes, using a

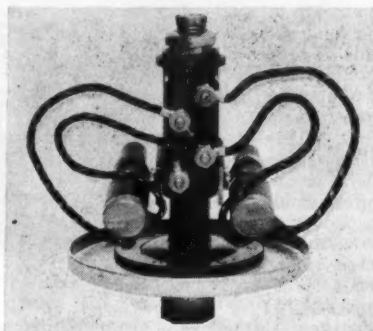
mercury to mercury contact. Units are almost indestructible. They are moisture, insect and dust proof, and because of their construction, they cannot arc, pit or corrode. Guaranteed for three years.

Performance—Cut in pressure is 10 to 40 lbs. Cut out pressure is 20 to 70 lbs. Pounds pressure between cut in and cut out is referred to as differential, and is variable between 10 and 60 lbs.

Description—Snap action eliminates possibility of false stops and starts due to chattering—actuating mechanism must move through entire range before contacts can open or close. Close tolerances assured through use of pressure formed Zamak for spring housing and saddle and diaphragm bottom cover. Push rod and latch are hardened steel. Diaphragm is of pure gum rubber with duck insert for extra strength. Operating and resistant pressures are directly opposed. No levers or bearings. Only two moving parts. Model 15-45 is fitted with 1/4" pipe connection, and 3/8" can be supplied on special order. Bulletin CG1011 gives complete specifications.

CENTER & GIVEN CO., Dept. CEP, 2024 University Ave., Berkeley, Calif.

When inquiring specify CEP2412... see information request blank, pgs. 16-17



Semi-Automatic Labeler

Container or Label Size Changes Made with
Minimum Change-Over Parts

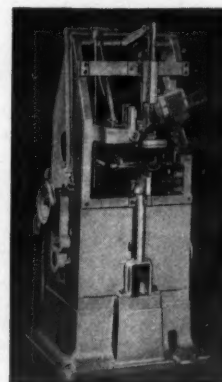
Uses—For production application of single labels, from postage stamp size up to 6 1/2" square, on containers of every size and shape up to 4" diameter.

Features—Label holder at operator's right hand refilled without going to back of machine. Variable speed drive permits synchronization of labelling with other operations. Gum applicator gums entire label surface and, with positive vacuum label control, assures firm, smooth labelling. Labels are extracted individually from label holder, eliminating static troubles. Unit requires only 2 1/2' x 3' floor space.

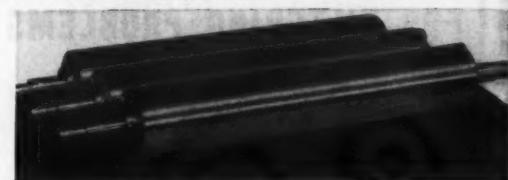
Description — Units will label from 20 to 60 bottles per minute. Can be furnished with portable truck. Safety lock prevents accidental or unauthorized operation. Label holder, gum box, bottle stand and wiper are all readily accessible to operator. Single 1/2 H.P. motor takes care of both labeler drive and vacuum pump.

ECONOMIC MACHINERY CO., Dept. CEP, 18-A Grafton St., Worcester, Mass.

When inquiring specify CEP2413... see information request blank, pgs. 16-17



YOUR OLD ROLLS CAN BE MADE "BETTER THAN NEW"

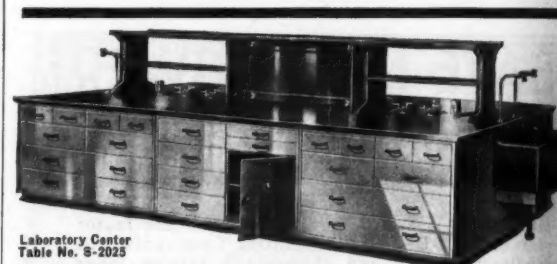


*...By having them covered with
Monel, Nickel or Inconel*

- ★ "Better than new," because these new surfaces are hard, rustproof, highly corrosion resistant—they maintain their initial smoothness, they protect your products.
- ★ Covers are solid sheet metal—not sprayed, cast, or electroplated.
- ★ Covers are bonded to your steel, cast iron, bronze or aluminum rolls by a welding process. No costly preparation of the roll core is necessary.
- ★ Ideal for any type of roll—unheated, heated or chilled.
- ★ Especially economical for large rolls (over 5" in diameter). These covers are now in service on rolls as large as 6 ft. in diameter; on rolls exceeding 20 ft. in length.
- ★ Covers can be ground to a high lustrous finish.
- ★ Especially valuable in paper, chemical, electroplating, textile and glass plants.

WRITE TODAY FOR DESCRIPTIVE CIRCULAR
THE INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street
New York, N. Y.

When inquiring specify CEP2414... see information request blank, pgs. 16-17



Laboratory Center
Table No. S-2025

Kewaunee Service Is Geared to Today's Need for Speed...

Does the quickening pace of your business today call for additional Laboratory Equipment? If it does, you will be glad to know that Kewaunee is ready to serve you with the speed your requirements demand. Here you will find equipment to meet every industrial or private laboratory need, whether you require a few pieces or carloads. Here you will find Equipment that insures maximum convenience for the technician. Above all Kewaunee Laboratory Furniture has that built-in quality which makes it a sound investment—always.

Write or wire for the Kewaunee Catalog.

Kewaunee Mfg. Co.
LABORATORY FURNITURE EXPERTS

C. G. Campbell, Pres. and Gen. Mgr.
320 Lincoln St., Kewaunee, Wis.

Eastern Branch: 220 E. 42nd St., New York, N. Y.
Mid-West Office: 1208 Madison St., Evanston, Ill.

Representatives in Principal Cities.

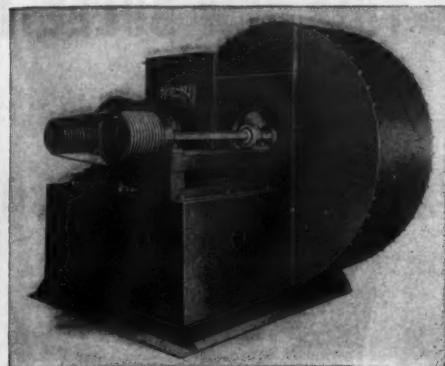
Specify KARCITE MOLDED CERAMIC SINKS

Free from distortion—insoluble to solvents and mineral acids (except hydrofluoric). Will not crack or break under ordinary weight shocks and thermal shocks. Gray black color—smooth-surfaced—dull gloss finish. Lighter—stronger—easier to clean. Write for Catalog.



Karcite Sink No. S-400

When inquiring specify CEP2415... see information request blank, pgs. 16-17



Norblo Exhaust Fans For Your Air Handling Problems

Safe, Economical, Efficient

Cut hazards, get maximum protection, reduce insurance premiums and provide safe ventilation with Norblo Exhaust Fans. High and Low Speed Types.

Write for Bulletin NEF

The Northern Blower Company

8407 Barborton Ave.

Cleveland, Ohio

When inquiring specify CEP2416 ... see information request blank, pgs. 16-17

CHEMICAL EQUIPMENT PREVIEW

For The Chemical Process Industries

New Chemicals New Materials
New Equipment New Applications
of special interest in
Chemical and Process Manufacturing

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Technical Editor Prof. H. McCormack
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JANUARY-DECEMBER, 1941

26,500 Copies of This Issue

... covering all manufacturing plants in Rubber, Chemicals, Paint, Glass, Explosives, Fertilizers, Rayon, Brick and Tile, Plastics, Soap, Paper, Glue, Brewing, Distilling, Sugar, Coke, City Water Treatment, Oil Refining, Leather Tanning, Cement, China and allied lines.

Sewer & Pipe Cleaner

Electric Unit Removes Stoppages 100's of Feet
From Opening



Features — Machine removes stoppages several hundred feet from sewer or pipe opening, even when necessary to pass through elbows and traps. Will cut through roots, rags, grease, chips, cinders and many other obstructions.

Description — This electric unit uses different types and stiffnesses of revolving coiled wire

"snakes" with various augurs and cutting tools attached to them. Gripping chuck revolves the "snakes" eccentrically mounted on the spindle. Eccentric action of chuck transmits a whip to tool working in the line. Machine is driven by a ½ H.P. universal, reversible, variable speed motor which is hooked up to spindle pulleys by means of V-belts. A split pulley on motor can be adjusted to lighten tension on V-belts, allowing them to slip before the "snakes" become overstrained in case an extra heavy obstruction is encountered. Case and base of machine are fabricated sheet steel; unit is mounted on casters for easy rolling. Overall length is 15", width is 15" and height is 14". Net weight is 85 lbs.

OSTER MFG. CO., Dept. CEP, 2057 East 61st Place, Cleveland, Ohio.

When inquiring specify CEP2418 ... see information request blank, pgs. 16-17

WHEN CONSIDERING MIXERS

CONSIDER Ransome's
90 years providing industry with the best for
best results



CONSIDER placing your problem before Ransome engineers for a solution based on experience



Industrial Division
RANSOME CONCRETE
MACHINERY CO.
DUNELLEN NEW JERSEY

Since 1850
Ransome

SPECIALISTS
IN MIXERS

When inquiring specify CEP2419 ... see information request blank, pgs. 16-17

Save your Man-power!

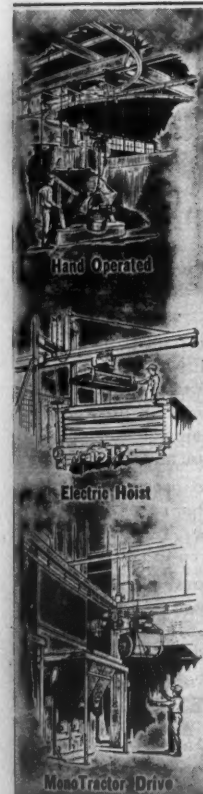
Skilled labor is expensive. Why waste it in handling operations. A simple overhead monorail system to perform the "lift" and "Carry" jobs will show an immediate return in saved man-power.

Standard parts assemble into complete systems to meet special requirements so that American MonoRail engineers are able to solve many problems without excessive cost. Let them survey your requirements at no obligation.

Write for copy of "Blue Book" showing hundreds of installations.

AMERICAN MONORAIL

13109 Athens Avenue
CLEVELAND, O.



When inquiring specify CEP2417 ... see information request blank, pgs. 16-17

"CHECK IN AT
DEWITT OPERATED
HOTELS"

In Cleveland
HOTEL HOLLENDEN

In Columbus
THE NEIL HOUSE

In Akron
THE MAYFLOWER

In Lancaster, O.
HOTEL LANCASTER

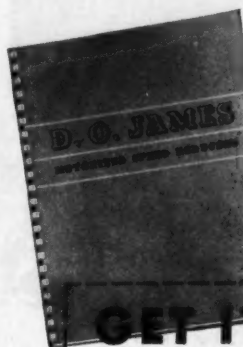
In Corning, N. Y.
BARON STEUBEN HOTEL

THE HOTELS THAT CHECK WITH EVERY TRAVEL STANDARD

THEODORE DEWITT R. F. MARSH
President V. P. & Gen. Mgr.

When inquiring specify CEP2420 ... see information request blank, pgs. 16-17

MOTORIZED Speed Reducers

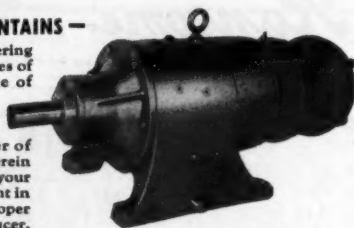


D.O. James Motorized Reducers are precision manufactured to meet the requirements of service for which they are designed. They have the highest possible efficiency, accessibility and are most compact.

GET IT! Initial this space, attach to your letterhead and mail to us

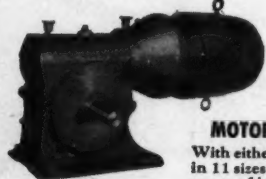
THIS CATALOG CONTAINS —

112 pages of engineering data, weights and prices of the D. O. James line of Motorized Reducers. It lists completely selection tables, service factors and character of load. Information therein will prove helpful to your engineering department in the selection of the proper type of Motorized Reducer.



MOTORIZED PLANETARY REDUCER

Horizontal and vertical drive, made in 35 sizes, ratios 10 to 1200:1. $\frac{1}{4}$ to 75 H. P.



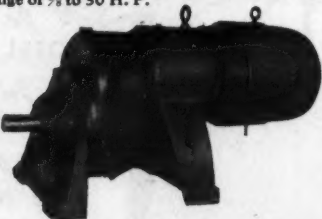
MOTORIZED WORM GEAR REDUCER

With either horizontal or vertical drives. Made in 11 sizes, ratios 6 to 80:1 and a horse power range of $\frac{1}{8}$ to 50 H. P.

MOTORIZED HELICAL REDUCER

With either horizontal or vertical drive. 13 sizes, ratios $1\frac{1}{4}$ to $9\frac{1}{2}$:1. $\frac{1}{8}$ to 50 H. P.

Sales and engineering offices in ALL principal cities



D.O. JAMES

D. O. JAMES MANUFACTURING COMPANY

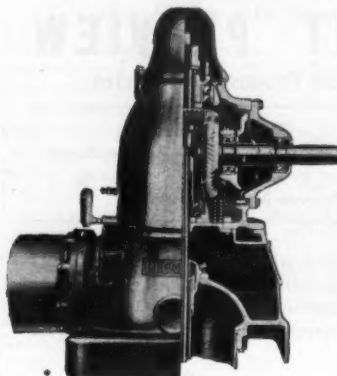
ESTABLISHED 1888

1120 WEST MONROE STREET • CHICAGO, ILLINOIS

FOR OVER 50 YEARS MAKING ALL TYPES OF GEARS AND GEAR REDUCERS

When inquiring specify CEP2421... see information request blank, pgs. 16-17

Geared Heads For Deep Well Turbine Pumps



Features — Streamlined head assembly has gearing completely housed. Gears are heat-treated, hardened and ground nickel alloy and lapped for specific operating tooth capacities. Take-off shaft carries increased loads. All four bearings are lubricated by oil-pressure system. Oil seal is placed on end of bearing housing to prevent leakage. Seal is

equipped with annular garter spring and treated leather element is oil-resistant. Annealed semi-steel castings are used to insure against distortion and misalignment of gears and other moving parts.

Description — "Gearturbo" head provides for connection with flat belt pulley, V-belt or for direct connection through a needlepoint or universal shaft to gas engines, steam engines or any other power unit. Standardized speed ratios of 1 to 1, $1\frac{1}{3}$ to 1, $1\frac{1}{2}$ to 1, and 2 to 1 are provided. Double-row ball bearings support the horizontal and vertical shafts and are placed adjacent to the spiral bevel gears. Extra heavy duty thrust bearing supports the lower end of the geared shaft sleeve, while an additional thrust bearing supports outer end of horizontal shaft.

PEERLESS PUMP CO., Dept. CEP, 301 West Avenue 26, Los Angeles, Calif.

When inquiring specify CEP2422... see information request blank, pgs. 16-17

3-Stage Motorblower

Power Consumption Varies With Volume Used

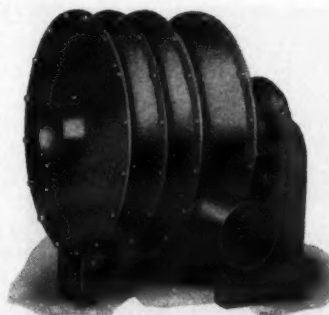
Uses — For furnishing air for general industrial uses.

Features — Equipment can be installed on any floor as no special foundation is required. Quiet operation abetted by oversize motor shaft. Maintenance of constant pressure over entire volume range is stressed by maker as being particularly advantageous in furnishing combustion air to oil and gas-fired furnaces. Built-in blast gate is located in blower discharge and flexible pipe connections are provided for connecting either intake or discharge to shop piping.

Description — Blower characteristics are such that power consumption varies approximately in proportion to air volume delivered. Type "G" blowers are built in 72 sizes: pressures from $\frac{1}{2}$ to $2\frac{3}{4}$ lbs., and volumes from 100 to 4500 cfm. Discharge openings on all sizes can be located in any one of eight positions in steps of 45 deg. Sturdy fabricated base is integral part of back plate of blower casing, thus holding motor and blower shaft in exact alignment. Blower has but one rotating part. Has light aluminum alloy propeller. Bulletin 2671 gives complete specifications.

INGERSOLL-RAND CO., Dept. CEP, Phillipsburg, N. J.

When inquiring specify CEP2423... see information request blank, pgs. 16-17



GET THIS NEW BULLETIN!



It gives you the whole story on continuous centrifugal filtration and what it means to you in terms of drier, better washed solids and more of them, at lower cost.

Whatever your filtering problem this bulletin contains information you'll find worth having. Write today, for your copy.

BIRD MACHINE COMPANY
SOUTH WALPOLE • MASSACHUSETTS

When inquiring specify CEP2424... see information request blank, pgs. 16-17

"STANZOIL" Neoprene Industrial GLOVES

Prevent Costly "Limping" Hands

● Hands may "limp" as the result of mild skin irritations — or be completely disabled by infections resulting from chemical burns. Either way, disability claims go up, production goes down — and Management pays.

These time, production and disability losses can largely be avoided! Supply "Stanzoil" Industrial Gloves to your men and women employees who work in oils, greases, solvents, etc., and you increase their value to you and their comfort to themselves. Both you and they benefit!

"Stanzails" are made of du Pont neoprene and are used in principal divisions of industry. They cost no more than high-grade gloves of natural rubber, but in many uses they outlast rubber 4 to 7 times, even longer.

You can profit by Pioneer's 22 years' successful glove-making experience. We will help you select the correct

"Stanzails" from more than 20 types and a wide range of sizes. Address today:

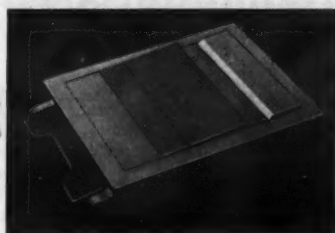


Synthetic Rubber Division
THE PIONEER RUBBER CO.
239 TIFFIN ROAD, WILLARD, OHIO, U.S.A.
New York • Chicago • Los Angeles

MADE WITH DU PONT NEOPRENE

When inquiring specify CEP2425... see information request blank, pgs. 16-17

NIAGARA PERMAFLUX MAGNET



(Patents applied for)

AS STRONG AS AN ELECTRO MAGNET

The new, *Permanent Magnet*, chute or spout type, for dry and wet materials to *Eliminate Iron, Fire Hazard, Damage to Equipment*. This separator gives years of dependable, continuous service without any possible loss of power. Class "A"—Highest available Rating by Mutual Insurance Underwriters' Bureau.

Simple to install. Easy to clean

NO ELECTRICITY. NO WIRING. NO MAINTENANCE



SIZING AND GRADING PROBLEMS?

Get the details on the
NIAGARA Line.

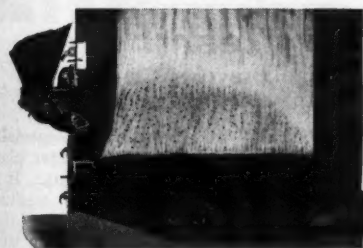
SUPER Sifters and GYRO-WHIP Sifters — 2 to 250 mesh — 4 times the capacity per sq. ft. of sifting surface over old systems and principles.

ELECTRO-MAGNETS
AIR SEPARATORS
DUST COLLECTORS

THE RICHMOND MANUFACTURING CO., Lockport, N.Y.

When inquiring specify CEP2426 . . . see information request blank, pgs. 16-17

REDUCE STEAM COSTS



Stationary Grate Type—Fine particles of fuel are burned in suspension, coarse coal on the grate. **OVER THROW Rotor** action insures uniform fuel distribution. Flexible, dependable and efficient, with a wide variety of fuels. Dumping grate type also available.

Detroit RotoStoker

Economically burns wide range of fuels. Successfully handles rapidly fluctuating loads. Easy to operate.

RotoStoker is one of seven types of Detroit stokers including both underfeed and overfeed, for all requirements from the small heating plants to large power operations. Save coal—save labor.

Write for Catalog No. 839—today

DETROIT STOKER COMPANY

General Motors Bldg., Detroit, Mich.

Since 1898

Works—Monroe, Mich.

Built in Canada—London, Ont.

When inquiring specify CEP2427 . . . see information request blank, pgs. 16-17

"Ferrofilter"

No Moving Parts—Low Operating Cost—High Capacity

Uses—For magnetically removing iron and steel particles (even as fine as 1/25,000 inch) from suspension in liquids. Used in lubrication systems, vegetable oils, process water, food processing, etc.

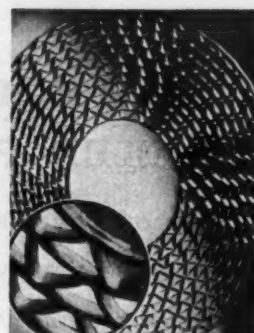
Features—Filters have no moving parts. Operating cost is low; wattage requirements show cost of about one cent an hour or less for even largest model. Maintenance cost practically non-existent. High rate of flow.

Operation—"Ferrofilter" is a magnetic separator and not a true filter. Unit consists of a set of magnetized screens enclosed in a casing, through which the liquid flows. Screens offer little resistance to the flow, but they present many feet of strongly magnetized edges to materials passing through. These comb and re-comb product, thus removing magnetic particles which are retained on screen edges until end of run. Machine is then demagnetized and flushed.

Description—Models are available in three types—gravity, underfeed and pipe line, and laboratory size is available. Direct current at 110-120 volts is required for several models. Portable tube-type rectifiers can be supplied for connecting to any 60-cycle a-c lamp socket. For all uses except oil service, metal parts in contact with liquid are of stainless steel or aluminum. Bulletin 15 gives complete details.

S. G. FRANTZ CO., INC., Dept. CEP, 161 Grand St., New York, N. Y.

When inquiring specify CEP2428 . . . see information request blank, pgs. 16-17



LIGHTNING MIXERS

THE OFF-CENTER PRINCIPLE



PROVIDE MORE SPACE ON TANK TOPS

This plan of a tank head is taken from our files of actual installations. Note mixer off the side gives more room and better arrangement than right angled gear reductions and centerline installation. Give your designers a real chance at usable heads with easy location of manholes, flanged openings, observation glass, vapor outlets, thermometer wells, etc., at the most advantageous places. Contrast with turbine, paddle or anchor type agitators located in center—making it necessary to locate all openings around the rim.

No space-consuming drive supports are necessary. When mounted on a flanged nozzle or manhole, the drive and supports occupy the minimum of space.

Send for Catalog B-68.

MIXING EQUIPMENT CO., Inc.

1085 GARSON AVENUE,

ROCHESTER, N. Y.

When inquiring specify CEP2430 . . . see information request blank, pgs. 16-17

Engine Safety Cut-Out

Combines In One Device Duties of Two Controls

Uses—Designed to protect stationary internal combustion engines by interrupting their operation if lubricating oil pressure drops hazardously low or if cooling water temperature rises too high. Has universal application—

for engines with a distributor type ignition the device is wired to break circuit on temperature rise or pressure fall; for engines with magneto type ignition, opposite terminals are used which short circuits primary of spark coil to ground; for Diesel engines, device is set up to control a solenoid valve installed in fuel line to the injection system.

Features—Device has no manual reset latch to keep reset button depressed while motor is being started. Has no separable well to install; special packing gland is provided.

Description—Two models are available, with and without manual reset; B Model is for motors with automatic starting equipment where means is provided to shunt circuit until motor starts and oil pressure rises to normal. Small 4 x 1/2 inch temperature element capsule is used which can be inserted in any 1/2" pipe tapping in block. Mercury switch handles switching action. Overall dimensions are 6 1/2" high, 5 1/2" wide and 2 1/4" deep.

MINNEAPOLIS-HONEYWELL REGULATOR CO., Dept. CEP, 2950 Fourth Ave., South, Minneapolis, Minn.

When inquiring specify CEP2429 . . . see information request blank, pgs. 16-17



"Ceiling's the Limit" FOR STORAGE—WITH A BAKER TILTING TELESCOPING FORK TRUCK

Here's the way to multiply the value of storage space, and increase plant capacity without expansion. In hundreds of installations Baker Trucks have paid for themselves many times over in rental savings alone.

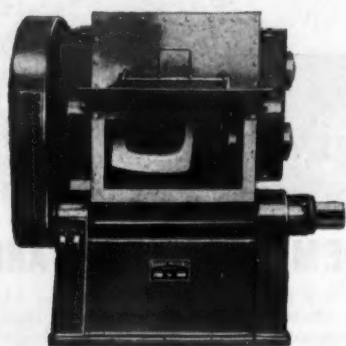


Write for
complete
information

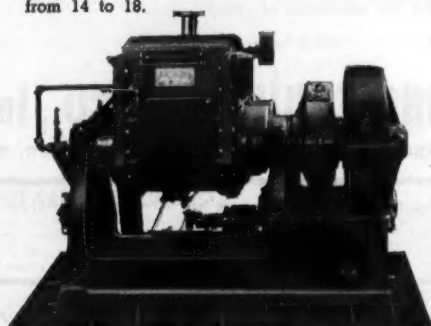
BAKER INDUSTRIAL TRUCK DIVISION of the Baker-Raulang Company
2163 WEST 25th STREET . . . CLEVELAND, OHIO

When inquiring specify CEP2431 . . . see information request blank, pgs. 16-17

MIXERS · MIXERS · MIXERS

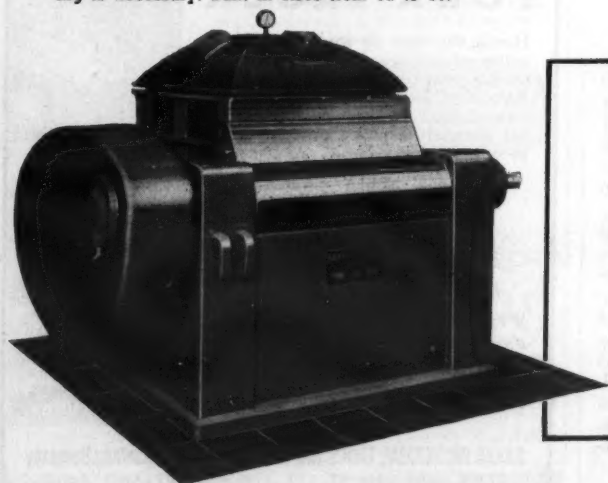


TYPE "N" WITH HYDRAULIC TILT—This is another new B-P development, especially suited to the mixing and kneading of heavy plastic masses. This machine, with top of trough in working position only slightly higher than discharge lip in tilted position, is particularly adapted to plants where charging and discharging must be performed from same floor level. Available in sizes from 14 to 18.



TYPE "V" DISPERSER—One of the most widely used mixers in the industry. This machine is intended for rubber, paints, inks, enamels, plastics or any product which requires dispersion of solids in a heavy mass or vehicle. Sizes 11 to 16.

THE NEW TYPE "T" (Below)—A mixing and kneading machine equipped with single stuffing box to maintain high vacuum when handling materials such as plastics, food products, etc., in which intimate mixing during drying or evaporating is necessary. Built in sizes from 12 to 18.



PROCESS EQUIPMENT BY BAKER PERKINS

For more than 40 years Baker Perkins Mixers have been known to chemical engineers as superior in manufacture; consistently efficient in operation; and of great durability in service. With one of these machines your mixing and kneading requirements will be amply cared for—satisfactorily, economically.

B-P Mixers are available for practically any service. In addition to standard cast iron and steel, these machines are supplied in corrosion resistant alloy steel or non-ferrous metals. A wide variety of B-P Developed Mixing Blades assures mixing service best adapted to individual requirements.

Catalogs on request.

BAKER PERKINS INC.

CHEMICAL MACHINERY DIVISION

SAGINAW, MICHIGAN

SALES OFFICES:

NEW YORK • CHICAGO • SAN FRANCISCO

Aluminum & Tin Cleaner

Completely Soluble; Goes Into Solution Immediately

Uses—Special alkaline silicate cleaner for use on aluminum, tin and alloys of either metal. Cleaner is for use in removing animal, vegetable or mineral oils, as well as solid dirt, from sensitive metal surfaces. Applications in food and packing plants; also in metal working and finishing plants which process aluminum or tin parts requiring a cleaner that provides protection against etching or spangling.

Description—Cleaner is known as "Metso 88 Special." It permits effective use in either hot or cold, hard or softened water. It is a free rinser. Going into solution immediately, and being completely soluble, danger of material settling to tank bottom is eliminated. Cleaner is packed in concentrated liquid form and only requires dilution before use. Entirely safe for hand cleaning.

PHILADELPHIA QUARTZ CO., Dept. CEP, 121 South Third St., Philadelphia, Pa.

When inquiring specify CEP2433 . . . see information request blank, pgs. 16-17

Emulsifying Agent

Uses—Fluid emulsions containing sodium chloride, oxyquinoline sulphate, acetic acid, hydrochloric acid and other electrolytes can now be made with this new emulsifying agent known as "Emulgor A." Maker recommends it for cosmetics, textiles, paper, leather and all purposes where an emulsion is required containing salts, acids and other electrolytes.

Performance—Stable emulsions of mineral oil, pine oil, toluol and other oils, waxes and solvents containing as high as 6% concentrated hydrochloric acid have been made with this agent.

Description—"Emulgor A" is a light-tan colored, wax-like material with a melting point of 44-53 deg. C., and a specific gravity of 1.04 to 1.06 (25 deg. C.). It is dispersible in hot water, a 5% dispersion having a pH of 2.6 to 2.8 at 25 deg. C.

GLYCO PRODUCTS CO., INC., Dept. CEP, 148 Lafayette St., New York, N. Y.

When inquiring specify CEP2434 . . . see information request blank, pgs. 16-17

Rubber Mesh Filter

Speeds Filtering; Prevents Clogging of Filter Medium

Uses—Known as "Filtomesh," this product is a specially designed rubber "cushion," used between the filter plate and filter medium . . . cloth, paper or fiberglas. It is applicable to all types of filters in which filter medium is backed by a channeled or perforated plate or disc. Filtomesh is corrosive-resistant, but should not be used with concentrated acids at elevated temperatures.

Features—Speeds filter and/or reduces filter-cleaning costs. Prevents filtering medium from clogging and maker states an average of 50% increased efficiency. Rubber mesh prevents filter cloth, paper or fiberglas from sealing against filter plate, thus shutting off filtering area. Drainage channels in filter plate cannot become choked by pressure of cloth against plate.

Performance—Maker states chemical manufacturer producing for food products field, reported 50% plant production increase and a moisture content reduction of 50% in finished product. Plating firm reduced cost of cleaning filters from twice a week to once in ten days, with no reduction in filtering speed; saved \$225.00 per month.

Description—Rubber mesh material has meshes about 1/4". Rubber is almost pure gum and contains no injurious materials. Compounded to serve in filtering of all bright nickel solutions used in plating industry. Samples will be sent upon request.

PARAMOUNT RUBBER SERVICE, INC., Dept. CEP, 1434 Rosedale Court, Detroit, Mich.

When inquiring specify CEP2435 . . . see information request blank, pgs. 16-17

Mix -- Grind -- Disperse in Half the Time

ABBE-LENART MIXER

Produces More Uniform Material in Less Time and Saves on Equipment.

This unique mixer combines a grinding, kneading, dispersing and dissolving action producing more intensive and homogeneous milling and distribution of solids in the liquid vehicle.

Experience shows processing time saving from 25 to 60% over that required to do the same job in other equipment, saving also in overall production and power costs.

On paints and lacquers — thorough mixing is accomplished in ½ to 2 hrs. for finished product; tinting takes only 5 to 10 minutes.

On ointments creams and pastes the Abbe-Lenart grinds and mixes under vacuum, saving half the labor and time, replacing 2 or more separate operations.

Read the full performance story in Bulletin 48. Write for a copy.

ABBE ENGINEERING CO.
Mills • Mixers • Sifters
4 CHURCH ST. NEW YORK

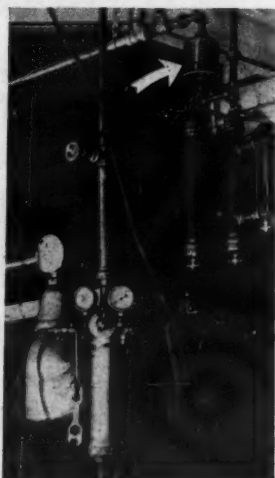
When inquiring specify CEP2436 ... see information request blank, pgs. 16-17

END STEAM BLISTERS, SAND BLAST PUTTYING, WATER LOGGED VALVES!

Water in your air lines runs up maintenance costs, spoils sprayed finishes, corrodes internal parts. You can have clean, dry air at low cost with an Aridifier—cleans and dries air by centrifugal force. No baffles, screens or filters; nothing to clean out or replace. Thousands in use. Easy to install. For ¾" to 10" lines. Quickly return their cost. Send for Bulletin No. 939.

Free Trial Offer!

Try before you buy—see what it will save for you —30 days free trial.



LOGAN ENGINEERING CO.

4900 Lawrence Ave., Chicago, Ill.

Offices in Principal Cities

The ARIDIFIER
Dries and Cleans Compressed Air

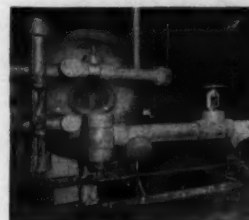
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Save Heat---Save Money

with **STIC-TITE**
PLASTIC INSULATION



Use **STIC-TITE** on
Boilers, Furnaces,
Piping, Valves and
Fittings, Hot Tanks,
Kettles, Heaters, Re-
action Vessels, Hot
Air Ducts, Cookers,
Steam Pumps.

MORE EFFICIENT

Simply mix with water and trowel the easily molded plastic cement around flat, curved or difficult shapes, hot or cold. No harmful ingredients; no skill, no special tools required.

BETTER COVERAGE

100 lbs. of STIC-TITE covers at least 50 sq. ft. — 1" thick when dry—no shrinkage in thickness; less expensive than block insulation.

EASY TO APPLY

STIC-TITE dries to a clean, smooth, strong, jointless, hard finish that can be painted. It sticks on tight.

SMOOTH-JOINTLESS

100% RECLAIMABLE
Used at temperatures up to 1200° F. STIC-TITE can be removed from equipment, mixed with fresh water and reapplied.

Write for Bulletin I-62

REFRACTORY & INSULATION CORP.
383 Fourth Ave. New York, N. Y.

When inquiring specify CEP2438 ... see information request blank, pgs. 16-17

"COLORFUL RECREATED STONE"
by mulling in the

SIMPSON
INTENSIVE
MIXER



View of No. 2—6' Dia. Pan Simpson Mixer on artificial stone at Roscoe Corp., Lafayette, Ind., and of sample stone facings produced.

ANOTHER EXAMPLE OF A PRODUCT SUCCESS

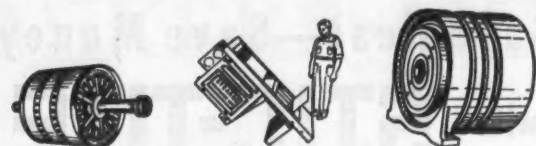
by means of "the mulling process of mixing," when former grinding and stirring methods proved inadequate. A mixture of shale, lime, mineral pigments, aggregate and moisture, thoroughly integrated in the Simpson Mixer to produce durable and distinctive new building products for modern home and industrial construction.

Scores of mixing problems wherein uniformity is important have been solved successfully by the use of the modern heavy-duty, low-cost Simpson Intensive Mixers. Many of these have begun in our Laboratory, where complete facilities are available, without obligation, to demonstrate the machines.

INVESTIGATE NOW — DATA OR REPRESENTATIVE — NO OBLIGATION

NATIONAL ENGINEERING COMPANY
Dept. EP 549 W. Washington Blvd. Chicago, Ill., U. S. A.
Representatives in all sections of U. S. and foreign countries.

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MAGNETIC Equipment
BY A PIONEER MANUFACTURER



The same ownership and management has directed our company since its inception and our many years of pioneering experience in the design and construction of magnetic equipment have enabled us to meet the needs of industry economically and efficiently in problems of separation, purification, reclamation, concentration, protection or power transmission.

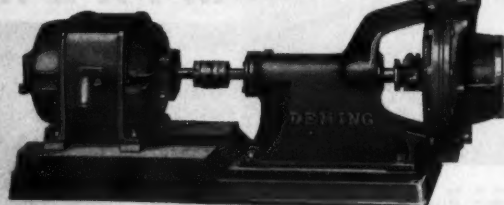
The use of Stearns magnetic products may be your opportunity to lower production cost. An inquiry may prove a definitely profitable investment. Write for our interesting bulletin, The House of Magnetic Magic.

Stearns SEPARATORS — DRUMS — ROLLS
CLUTCHES — BRAKES — SPECIAL
MAGNETS
MAGNETIC MFG. CO.
642 S. 28th St. Milwaukee, Wis.

When inquiring specify CEP2440... see information request blank, pgs. 16-17

DEMING

CENTRIFUGAL PUMP WITH SEPARATE LIQUID END...



● Design of this pump not only saves you money on first cost but assures low cost of maintenance and longer service per dollar of investment.

Liquid end is separate from support head. This makes it possible to furnish only the liquid end of special alloys for pumping corrosive liquids. Support head is standard cast iron.

Standard sizes of this Deming Side Suction, Two Ball Bearing Centrifugal Pump range from 1 to 10 inches with capacities from 10 to 3600 gallons per minute.

Write for Illustrated Bulletin No. 4280.



THE DEMING COMPANY · SALEM, OHIO

When inquiring specify CEP2441... see information request blank, pgs. 16-17

(Continued from first page)

Over 30,000 Came, Saw

along with the exhibit, indicating the purposes for which the various pieces in the exhibit were intended.

There seems to be a real exposition technique, the development of which was indicated by most of the exhibitors and this was quite apparent in the response from the visiting public. The writer formed the opinion that good exhibitions, like good advertising, require considerable thought on the part of the firm or individual looking for attention from the public.

A. M. McCormack
Technical Editor

Moisture Teller

Automatic Timer Shuts Off Instrument When Material Has Dried

Uses—For determination of moisture content of granular and fibrous materials, powdered materials, cereals, etc.
Feature—Unit now has automatic timer that automatically shuts off moisture teller after material has dried.

Operation—In the case of moulding sand, for example, where one minute is required for the test, operator inserts pan containing sand sample under the moisture teller; he then sets timer for one minute and is free for that time. Automatic timer shuts off moisture teller, operator removes sample pan and reweighs the material to quickly arrive at sample's moisture content.

Description—Unit consists of sturdy, motor-driven fan. Air is heated by electric element and forced through testing sample. Sample pan is 500 mesh Monel with filter cloth bottom. Granular and fibrous materials require from 1 to 3 minutes to dry while powdered materials and cereals require 5 minutes.

HARRY W. DIETERT CO., Dept. CEP, 9330 Roselawn Ave., Detroit, Michigan.

When inquiring specify CEP2442... see information request blank, pgs. 16-17



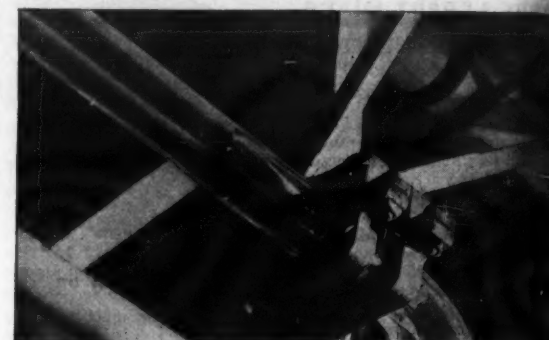
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When you have read this issue, remember your associates who would like to see it.

☐ President
☐ Vice President
☐ General Manager
☐ Chief Chemist
☐ Chief Engineer
☐ Research Director
☐ Works Manager

Pass On To Name Checked

GLASS PIPING PROVES VALUE IN WINERY...



"PYREX" Piping has been on the job in the plant of the Taylor Wine Company of Hammondsport, N. Y., for better than 10 years. Installed because it eliminates any possibility of metallic pickup by the finished wine, is easily cleaned and sterilized, and because it permits visual inspection for cleanliness and a check on wine quality and color, "PYREX" Piping has effected an economical solution to an important conveying problem. Its many other properties, too—resistance to thermal shock, chemical stability, etc., have proved equally as valuable here as they have in many other food processing plants. Let a Corning Engineer prove to you how "PYREX" brand Industrial Glass can be used in the solution of your problems. Write to Corning Glass Works, Corning, N. Y.

"PYREX" is a Reg. Trade-Mark and indicates manufacture by Corning Glass Works



When inquiring specify CEP2443... see information request blank, pgs. 16-17



TOUGH REPAIR for CONCRETE

Avoid accidents! Prevent costly delays. Repair holes, cracks, broken places in concrete floors, or resurface an entire area with the durable RUGGEDWEAR RESURFACER. No chipping or chipping required. Merely sweep out spot to be repaired—mix the material—trowel it on. Holds solid and tight right up to irregular edge of old concrete. Used indoors or out. Dries fast. Costs only 10c to 14c per sq. ft.

Request 74 page "Building Maintenance Handbook"

MAKE THIS TEST!
FLEXROCK COMPANY
2311 Manning St., Philadelphia, Penna.
Please send me complete RUGGEDWEAR information... details of FREE TRIAL OFFER. No obligation.

Name _____
Company _____
Address _____

When inquiring specify CEP2444... see information request blank, pgs. 16-17